Western Rajputana States Residency & Bikaner

RAJPUTANA GAZETTEERS.

VOLUME III-A.

THE WESTERN RAJPUTANA STATES RESIDENCY

AND

THE BIKANER AGENCY.

TEXT

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PREFACE.

The earlier Gazetteers of these States, namely those of Jaisalmer and Jodhpur written by the late Colonel Walter, that of Sirohi by the late Colonel Baylay, and that of Bikaner by Captain (now Colonel) Powlett, form the basis of this volume. I have also quoted freely from that well-known book "*The Annals and Antiquities of Rajasthan*," which was written by the late Lieutenant-Colonel James Tod, whose intimate knowledge of Rajputana has never been equalled, and which, in the words of Sir Alfred Lyall, is "perhaps the most valuable and exhaustive special study of Indian history and manners that has ever been produced."

As elsewhere in the Province, the Darbars very kindly deputed one or more officials to collect all available information for me under certain prescribed heads, and my thanks are due to the following gentlemen for much help rendered in the earlier stages :—Rao Sahib Lakshmi Das Sapat, Diwan of Jaisalmer; Mr. Kesar Ram Bhatji, Professor at the Jaswant College, Jodhpur; the late Maulvi Muhammad Nur-ul-Hasan, who was at first Judicial Officer and subsequently Diwan of Sirohi; and Babus Sheo Govind Singh and Sheo Gulam of Bikaner, the former being the Head-Master of the Nobles' School, and the latter the Superintendent of the Mahakma Khas Office. Pandit Gauri Shankar, whom I mentioned in the preface to Vol. II-A of this series, and who has quite recently been put in charge of the new Museum at Ajmer, assisted me with the historical portion of both the Jaisalmer and Sirohi Gazetteers, and I desire again to thank him. Lastly, I am particularly indebted to Rao Bahadur Pandit Sukhdeo Prasad, C.I.E., of Jodhpur, for valuable notes on a variety of subjects; no one could have had a more able or more willing coadjutor.

K. D. E.

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Addenda and Corrigenda to the Western Rajputana States Residency and the Bikaner Agency Gazetteer.

VOLUME III.—A.

Page 1.—In the thirteenth line for "a scompared" read "as compared."

Page 7.—Opposite the sixteenth line insert the side-heading "Fauna." In the twenty-sixth line I have written, on the authority of page 182 of the late Col. Adams' book "The Western Rajputana States," that *three species of the imperial sand-grouse* are more or less common in Jaisalmer. I fear this is a mistake. I am assured by everybody that there is *only one species of imperial sand-grouse*, namely the large or black-bellied, and after nearly a year's residence in Bikaner, the cold weather home of the bird, I am satisfied that this is the case. The "spotted" and "pin-tailed" sand-grouse are of course found in Jaisalmer, but they do not belong to the so-called "imperial" variety.

Page 9.—Insert a full stop (*i*) after the word "Bhāti" where it occurs for the second time in line 15 from the bottom, and (*ii*) after the word "date" in line 7 from the bottom.

Page 11.—In the sixteenth line for "Wachuji" read "Wachujī."

Page 14.—In line 6 from the bottom insert a full stop after the word "minister."

Page 22.—In the twenty-first line for "Kābirpanthis" read "Kabirpanthis."

Page 27.—In line 20 from the bottom for "port" read "import."

Page 33.—In the thirteenth line for "Darbar's" read "Darbār's"; the last side-heading but one should be "*khālsa*," not "*khlāsa*."

Page 38.—In the seventeenth line insert a hyphen after "improb."

Page 44.—In line 20 from the bottom for "Nānā" read "Nāna."

Page 49.—In line 24 from the bottom for "*foveslatus*" read "*foveolatus*," and insert a bracket after this word as well as a hyphen after "*Hetero*"; in line 16 from the bottom insert a bracket after the word "*muricatus*"; and in the third line from the bottom insert a full stop after the word "all."

Page 54.—In the second line for "dispering" read "dispersing."

Page 57.—In line 15 from the bottom insert a comma after the word "Akbar."

Page 60.—In the seventh line for "defea" read "defeat."

Page 65.—The side-heading should be lowered so as to bring it opposite lines 21-23.

Page 74.—In the last line but one insert a comma after "1882."

Page 77.—In the fourth line insert a comma after the word "operations"; in the thirteenth line for "Government" read "government"; and insert a full stop after the third side-heading.

Page 78.—In the first line of the foot note insert a bracket before the word "population."

Page 87.—In the seventh line for "Oswāls" read "Oswāls."

Page 89.—In line 17 from the bottom for "Jaliās" read "Jatiās."

Page 90.—In the eighth line for "*panchyats*" read "*panchāyats*," and in the twenty-first line for "*bis*" read "*bīs*."

Page 92.—In the second line for "Jasnâthi" read "Jasnāthi."

Page 93.—In line 10 from the bottom for "Rajputs" read "Rājputs."

Page 94.—In the eighth line for "*khcīh*" read "*khich*"; in lines 17 and 10 from the bottom for "*bāndiā*" read "*bandiā*"; and in the last line for "Marwāri" read "Mārwāri."

Page 95.—In line 10 from the bottom insert a bracket after the word "colour."

Page 99.—In the second side-heading for "classifiation" read "classification."

Page 102.—The first and second side-headings should be in italics, thus: "*Bājra*," "*Jowār*"; in line 16 from the bottom for "*chīptū*" read "*chīptā*."

Page 103.—In line 10 from the bottom for "*jowār*" read "*gowār*."

Page 115.—In the fourth line for "serpertine" read "serpentine."

Page 132.—In the first side-heading for "ormer" read "former."

Page 136.—In line 15 from the bottom for "which" read "while."

Page 146.—In line 19 from the bottom for "*bhīm-bāb*" read "*bhūm-bāb*."

Page 173.—In the second side-heading for "instittution" read "institutions."

Page 175.—Lower the side-heading by three lines.

Page 181.—In the tenth line delete the first word "of."

Page 198.—In the eleventh line for "dais" read "daïs."

Page 208.—In line 19 from the bottom for "hotest" read "hottest."

Page 209.—In line 15 from the bottom for "soldium" read "sodium."

Page 245.—In the fourth line of the foot-note for "eights" read "eighths."

Page 246.—In the twenty-fifth line for "Guman" read "Gūmān"; delete the bracket at the end of the last line.

Page 247.—In the sixth line for "free booters" read "freebooters."

Page 257.—In line 15 from the bottom for "Girāsias" read "Girāsias," and for "Minis" read "Mīnās."

Page 265.—The second bracket in the twentieth line should come after "fee" and not after "Rs. 604"; in line 15 from the bottom insert a full stop after the word "south-east."

Page 266.—In the foot-note for "206-247" read "246-247."

Page 274.—In line 13 from the bottom for "Bhilāri" read "Bhīlāri."

Page 279.—The second side-heading should be in capitals, thus: "ARMY."

Page 286.—In the twentieth line for "others" read "otters."

Page 287.—In the last line but one reverse the positions of "*supra*" and "238-239."

Page 289.—In the eleventh line for "page" read "pages."

Page 290.—In line 16 from the bottom for "Nasirābād" read "Nasirābād."

Page 293.—In the fifteenth line insert inverted commas after the word "admiration"; in line 7 from the bottom after "cymbals" for a comma substitute a semi-colon.

Page 296.—In the eighth line insert a bracket after "1209"; and opposite the eighth line from the bottom insert the side-heading "Gaó Mukh."

Page 302.—In line 9 from the bottom for "ashees" read "ashes."

Page 312.—The last two lines of the last foot-note have been indifferently printed. They should run :—"grouse, 11 small grouse, and four ducks), while two other guns accounted for 58 (all imperial grouse) between them. The total bag was thus 825."

Page 313.—In the last line of the foot-note insert a comma after "III-B."

Page 318.—In the twenty-seventh line insert inverted commas after the word "court."

Page 321.—In the second line of the foot-note for "*enroute*" read "*en route.*"

Page 323.—In the first side-heading for "Zorāwār" read "Zorāwar."

Page 336.—In line 21 from the bottom for "*pachhum*" read "*pachham.*"

Page 343.—In the twentieth line for "are" read "or."

Page 347.—In the sixteenth line for "at" read "of"; and in the last line but one for "pastyear" read "past year."

Page 348.—The second, third and fourth side-headings should be in capitals, thus: "Rents," "Wages," "Prices."

Page 351.—Delete the comma at the end of the twenty-eighth line, and two lines lower down for "*lois*" read "*loīs.*"

Page 352.—In line 22 from the bottom for "tariffaimed" read "tariff aimed."

Page 359.—In the first line for "also" read "other."

Page 366.—The number of this page should be as just stated, not "66."

Page 369.—In line 25 from the bottom for "committies" read "committees."

Page 371.—In line 13 from the bottom insert the word "or" between "corps" and "contingent."

Page 378.—The last side-heading should be in capitals, thus: "Surveys."

Page 380.—In the fifteenth line delete the word "five" but insert it in the next line between "last" and "years."

Page 393.—In the second line for "on" read "or," and in the sixth line for "beenoriginally" read "been originally."

Page 394.—In the last line but one for "thi" read "this," and delete the final letter of the word "outs."

Page 395.—In line 11 from the bottom for "1888" read "1887."

Page 397.—In the eleventh line for "Khāt" read "Khān."

TEXT.

THE WESTERN RAJPUTANA STATES RESIDENCY.

The Residency is situated in the west and south-west of Rājputāna, and comprises the three States of Jaisalmer, Jodhpur and Sirohi, lying between 24° 20′ and 28° 23′ north latitude and 69° 30′ and 75° 22′ east longitude. It is bounded on the north by Bīkaner and Bahāwalpur; on the west by Sind; on the south by Gujarāt; and on the east by Udaipur, the British District of Ajmer-Merwāra, and Kishangarh and Jaipur.

The Residency has a total area of 52,989 square miles, and in 1901 contained thirty-two towns and 4,909 villages, with 2,163,479 inhabitants. In regard to area, it is more than twice the size of any political charge in Rājputāna, while in the matter of population it takes second place. The density per square mile at the last census was only 41, a scompared with 76 for the Province as a whole; indeed, Jaisalmer in the extreme west, with its 4½ persons per square mile, is for its size (over 16,000 square miles) the most sparsely populated tract in India. Of the total population in 1901, Hindus formed nearly eighty-two, Musalmāns eight, and Jains seven per cent. The only towns that contained more than 10,000 inhabitants were Jodhpur (79,109 including the suburbs); Phalodi (13,924); Nāgaur (13,377); Pāli (12,673); Sojat (11,107); Sāmbhar (10,873); and Kuchāwan (10,749). All of these belong to Jodhpur except Sāmbhar, which is held jointly by the Jodhpur and Jaipur Darbārs.

A Political Agent was first appointed to Jodhpur in 1839, and Jaisalmer was added to his charge thirty years later. Sirohi was, for the most part, under the political control of an Assistant to the Governor-General's Agent up to 1870, when it was placed under the Commandant of the Erinpura Irregular Force. The officer last mentioned became Political Agent of the three States in 1879, and his charge was styled the Western Rājputāna States Agency in the following year, but this arrangement did not last long, for in 1881 the command of the Erinpura Force was separated from the duties of the Political Agent, and in 1882 the headquarters of the latter were moved from Erinpura to Jodhpur (where they still are), and the designation of Western Rājputāna States Residency came into use. Some further particulars will be found in Tables Nos. I and II in Volume III-B.

PART I.

JAISALMER STATE.



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JAISALMER STATE.

CHAPTER I.

PHYSICAL ASPECTS.

Position, area, boundaries, etc.

Jaisalmer, the most western of the States of Rājputāna, lies between 26° 4′ and 28° 23′ north latitude and 69° 30′ and 72° 42′ east longitude and has an area of 16,062 square miles; it is thus in regard to size third among the twenty States and chiefships of the Province. Its greatest breadth from east to west is about 170 miles, and greatest length from north to south 136 miles; in shape it is an irregular oval, the longest axis being 210 miles, lying north-east and south-west. It is bounded on the north by Bahāwalpur; on the west by the Shikārpur District of Sind, and by Khairpur; on the south and east by Jodhpur; and on the north-east by Bīkaner.

Configuration.

The country is almost entirely a sandy waste forming part of what is known as the great Indian desert. In the neighbourhood of Jaisalmer town, and within a circuit of about forty miles, the soil is very stony, and numerous low rocky ridges and hard undulating plains, covered in places to the south with smooth pebbles displaying the action of water, occur, but, with this exception, the general aspect is that of an interminable sea of sand-hills of all shapes and sizes, varying from twenty to two hundred feet in height and being sometimes two or three miles in length. The sand-hills in the west are covered with bushes of *phog (Calligonum polygonoides), lānā (Haloxylon salicornicum)* and *khejrā (Prosopis spicigera)*, and those in the east with tufts of long grass. Shifting sands, locally termed *dhrians*, are common, especially in the west near Shāhgarh, where they are often many miles in extent and where their surface is continually changing, the sand being in one place scooped out into funnel-shaped hollows, and in another thrown up into beautifully rounded hills; these *dhrians* are very difficult to cross as the path shifts almost daily, and the people say that they are gradually but very slowly travelling northwards. Of the State as a whole it may be said that no country could well bear a more desolate appearance. The villages are few and far between, sparsely populated, and consist, as a rule, of some circular huts of brushwood collected round a well of brackish water. In many cases well water, which is drinkable in the cold season, becomes actually poisonous in the hot weather. The average depth of the wells is said to be about 250 feet, but one measured some years ago by an officer of the Great Trigonometrical Survey of India was found to be 490 feet deep. The acme of desolation is reached in the west where the *dhrians* impoverish the already sterile country; there are no crops here, and the people live almost

entirely on milk in various forms, a little *bājra* and *moth* being, however, imported from Sind in exchange for sheep.

Rivers. The State possesses no perennial rivers, but there is one small stream called the Kākni, which rises near the village of Kotrī, seventeen miles south of the capital, and, after flowing first in a northerly and next in a westerly direction, forms a lake called the Bhūj *jhīl*; in years of heavy rainfall it deviates from its usual course and, instead of turning to the west, continues north for about twelve miles till checked by the recently constructed Dāiya dam. Another rivulet, the Lāthi-kī-nadi, formerly entered Jaisalmer from Jodhpur near Lāthi on the east and flowed west by north-west as far as Mohangarh, but its bed has contained no water since 1825 when the people tell of a very heavy rainfall.

Geology. The surface of the country is to a large extent covered by dunes of blown sand of the transverse type, *i.e.* with their longer axes at right angles to the direction of the prevailing wind. Rocks of jurassic age crop out from beneath the sand and have been divided* into the following groups :—

5. Abur (or Hābur) beds	Sandstones, shales and limestones, with a conspicuous fossiliferous band.
4. Parihār sandstones ...	Soft, white, felspathic sandstones, largely composed of fragments of transparent quartz.
3. Bīdesar (or Bhadāsar) group.	Purplish and reddish sandstones, with thin layers of black vitreous sandstone.
2. Jaisalmer limestones ...	Thick bands of buff and light brown limestone, interstratified with grey, brown and black sandstone and some conglomerate.
1. Bālmer (Bārmer) sandstones.	White, grey and brown sandstones and conglomerates, with fossil leaves and wood.

Boulder beds of glacial origin occur at Bāp, resting on Vindhyan limestones, and are considered to represent the Tālcher beds at the base of the Gondwāna system. To the north-west of the capital is a large outcrop of nummulitic rocks, probably of the same age as the Kīrthar group of Sind and thus indicating an easterly extension of the sea; the rocks represented are a white nummuliferous limestone (with which is associated ferruginous laterite) and shaly beds, mostly grey and impregnated with salt, though a fine-grained, pale buff-coloured fullers' earth is also found and is quarried for export under the name of *Multāni mitti.*

Botany. The most prominent constituent of the vegetation is the scrub jungle which shows forth, rather than conceals, the arid nakedness of the land. The scrub consists largely of species of *Capparis, Zizyphus,*

* R. D. Oldham, *Manual of the Geology of India*, 2nd edition, page 226, Calcutta, 1893.

Tamarix, *Grewia*, with plants characteristic of the desert, such as *rohīra (Tecoma undulata)*, *bāvli (Acacia Jacquemontii)*, *hingota (Balanites Roxburghii)*, and two cactaceous looking spurges called *thor (Euphorbia Royleana* and *E. neriifolia)*. Of indigenous trees the following are most common, though the term "tree" is rather a courteous acknowledgment of their descent than an indication of their size:—*khejrā (Prosopis spicigera)*; *jhāl* and *chhotī jhāl (Salvadora persica* and *S. oleoides)*; *arunja*, *khair* and *kumtia (Acacia leucophlœa*, *A. catechu* and *A. rupestris)*; two species of *ber (Zizyphus jujuba* and *Z. nummularia)*; and *nīm (Azadirachta indica)*. The shrubs include the *āk* or *ākrā (Calotropis procera)*, *hajeru (Mimosa rubricaulis)*, *lānā (Haloxylon salicornicum)* and *phog (Calligonum polygonoides)*; while the more important grasses are *bharūt (Cenchrus catharticus)*, *phalis (Panicum crusgalli)*, *murant (Chloris Roxburghiana)* and *sīwan (Panicum frumentaceum)*.

The fauna is neither varied nor important. Early writers have mentioned the existence of a few lions and tigers in the south and south-west, but these animals have not been seen for many years; the wild ass *(Equus onager)* also seems to have disappeared. Wild pig, *nīlgai (Boselaphus tragocamelus)* and even panthers are occasionally met with, and wolves and hyænas are not altogether rare. Black buck are found in small numbers in the east, and the following are more or less common throughout the State:—Indian gazelle *(chikāra)*, hare, grey partridge, grey quail, bustard of both the great Indian and lesser varieties, common and painted sand-grouse, and three species of the imperial sand-grouse, namely, the spotted, the pin-tailed and the black-breasted. Water-fowl are very rare visitors as there is little or no suitable ground for them, even in the best of years. Snakes are numerous, and the Administration Report for 1904-05 gives the following description of a poisonous reptile called *pīvana*:—"It is just like a snake in appearance. It does not bite. It is said that when it finds a man sleeping, it creeps over his breast and continues breathing into his nose and mouth. Its breath is poisonous, and it is very seldom that a man poisoned by its breath recovers." To this the Resident adds that when in Bīkaner he was told that the animal sought the warmth of the human breath to alleviate pain and that, its own breath being venomous, the victim of its attentions is poisoned and dies. A specimen of this peculiar snake was sent to Bombay for identification and turned out to be the Sind *karāit (Bungarus Sindanus)*.*

Climate and temperature.

The climate of Jaisalmer is dry and healthy, but the hot weather is very prolonged and the heat is intense and trying. The

* Since writing the above, I have come across a book called *Some account of the general and medical topography of Ajmer*; it is undated, but appears to have been published about 1840, the author being Assistant Surgeon R. H. Irvine. He mentions the existence of the *pivana* in Jaisalmer and, after describing it as "very poisonous, of a yellow colour, thick and short," adds:—"The superstitious natives say that it does not bite, but comes (like incubus) during the night and rests on the breast of the sleeper, and, on leaving this situation, strikes with its tail, and the person dies in the morning!"

temperature generally ranges between 64° and 115°, and is highest in May and June, when scorching winds prevail with much violence; the coldest period is in January, when the thermometer frequently reads below freezing point during the night, and the air is crisp and bracing.

Rainfall. The State is situated near the limits of that part of Asia which belongs to the rainless regions of the world, and the rainfall, always scanty and precarious, generally varies in different parts. Statistics are available for the capital since 1883, and for five places in the districts since 1895. The average annual fall at Jaisalmer town during the past twenty-three years has been 6·18 inches, and the averages for the four rainy months are July 2·04, August 1·82, June 0·73 and September 0·65 inches respectively. The year of heaviest rainfall was 1893, when 15·24 inches were received, namely, 1·28 in May, 2·07 in June, 7·53 in July, 2·21 in August and 1·27 inches in September; the worst year, on the other hand, was 1899, when the total fall was but 26 cents, and the whole of this was received in April. For the districts we have records for the last eleven years only, and the annual averages work out thus:—Bāp in the north-east 5·49 inches; Devīkot in the south-east 4·91 inches; Khābha and Dewa, both more or less in the centre, 4·72 and 3·54 inches respectively; and Rāmgarh towards the north-west 3·25 inches. These figures are probably from one to two inches below the *real* average, for we find that, whereas the annual average rainfall at the capital during the last twenty-three years was 6·18, it was only 4·16 during the last eleven years, *i.e.* less than at Bāp, Devīkot and Khābha. Some further details will be found in Tables Nos. III and IV (in Vol. III-B), which show that in 1897 Dewa, Jaisalmer and Bāp all received eleven inches or more, while in 1899 not a single cent was registered at either Khābha or Rāmgarh.

CHAPTER II.

History.

The chiefs of Jaisalmer belong to the Chandrabansi or Lunar race of which Budha was the founder at a very remote period of the world's history, and which subsequently expanded into fifty-six branches and became famous throughout India. The chronicles mention Prayāg (the modern Allahābād) as the cradle of this race, and Muttra as the capital for many years. The clan to which the Jaisalmer family belongs is called Jādon after Yādu or Jādu, who is said to have been the fourth in descent from Budha, and one of whose successors was the deified hero Srī Krishna, who ruled at Dwārka. On the death of the latter, the tribe became dispersed, and many of its members, including two of Krishna's sons, proceeded northwards beyond the Indus and settled there. One of their descendants, Gaj or Gajpat, built a fort called Gajni or Gajnipur (identified by Tod as the Ghazni of Afghānistān but believed by Cunningham to be in the vicinity of Rāwalpindi, where tradition places an ancient city named Gājipur), but, being defeated and killed in a battle with the king of Khorāsān, his followers were driven southward into the Punjab where, several generations later, Sālivāhan established a new capital which he called Sālbāhanpur after himself and which is generally identified with Siālkot. This chief is said to have conquered the whole of the Punjab, to have regained Gajni, and to have had fifteen sons, "all of whom, by the strength of their own arms, established themselves in independence"; but, in the time of his successor, Baland, "the Turks" (*i.e.* the races from Central Asia) "began rapidly to increase and subjugate all beneath their sway, and the lands around Gajni were again in their power." Baland's son, Bhāti, was a renowned warrior who conquered many of the neighbouring chiefs, and it is from him that the tribe takes its name of Bhāti or Jādon Bhāti. He was succeeded by his son, Mangal Rao, whose "fortune was not equal to that of his fathers" and who, on being attacked by the king of Ghazni, abandoned his kingdom, fled across the Sutlej and found refuge in the Indian desert which has since been the home of his descendants.

Early history.

The above is a brief and imperfect account of the early history of this clan, taken from the annals of Jaisalmer which, as Tod has remarked, must have been "transcribed by some ignoramus who has jumbled together events of ancient and modern date" Thus we are told that Sālivāhan founded the city of Sālbāhanpur in Vikrama *Samvat* 72 (or about 16 A.D.), that the third in succession to him, Mangal Rao, was driven southward into the desert, and that Mangal Rao's grandson, Kehar, laid the foundation of a castle called Tanot (still in Jaisalmer territory), which was completed in 731 A.D.; or, in other words, that Sālivāhan and his five immediate successors ruled

for more than seven hundred years! Again, it is stated that in Sālivāhan's time the cocoanut (an offer of marriage) came from Rājā Jai Pāl Tonwar of Delhi and was accepted, whereas the Tonwar dynasty ruled at Delhi for just a century from about 1050 A.D. The Sālivāhan above referred to has by some been identified with the hero of the same name, who defeated the Indo-Scythians in a great battle near Kahror within sixty miles of Multān and who, to commemorate the event, assumed the title of *Sākāri* or foe of the Sākas (Scythians) and established the Sāka era from the date of the battle (78 A.D.),* but, though this man may be the founder of Sālbāhanpur, he cannot be the Sālivāhan described in the annals as the great-grandfather of Mangal Rao, who must have lived in the seventh or eighth century.

Migration to the desert.

The country to which Mangal Rao fled about twelve hundred years ago was inhabited by various Rājput clans such as the Būtas and Chunnas (now extinct), the Barāhas (now Musalmāns), the Langāhas (a branch of the Solankis), and the Sodhas and Lodras (both branches of the Paramāras), and with the two last and the Barāhas he speedily came into collision and subjugated some of their territory. A list of his successors will be found in Table No. V in Vol. III-B. The first of these, Majam Rao, was recognised by all the neighbouring princes and married the daughter of the Sodha chief of Umarkot (now in Sind). His son, Kehar I, was renowned for his daring exploits, and is said to have married the daughter of Alhan Singh, the Deora† chief of Jālor (a fort now in Jodhpur territory). He laid the foundation of a castle, which he named Tanot after his son and which, according to the annals, was completed in 731, and became the first capital of the Bhātis in this part of the country; the place lies about seventy-five miles north-west of the town of Jaisalmer. In the time of his successors, Tano or Tanujī and Bijai Rāj I, fights with the Barāhas continued and the latter, finding that they could not succeed by open warfare, had recourse to treachery. Under pretence of putting an end to the feud, they invited Bijai Rāj's son and heir, Deorāj, to marry the daughter of their chief and, when the Bhātis had assembled, they fell on them and slew eight hundred, including Bijai Rāj himself; they subsequently invested and captured Tanot, killed most of the inhabitants, and the very name of Bhāti was for a time nearly extinct.

Tanot, the first capital.

Deorāj the first Rāwal.

Deorāj, however, escaped the massacre through the help of a Brāhman and, after remaining in hiding for some time, proceeded to the country of his mother, who was of the Būta clan, where he was given land and erected a place of strength which he called Deogarh or Deorāwar after himself; it is marked Derāwar on most maps and is now in Bahāwalpur about sixty miles from the northern frontier of

* A. Cunningham, *Archæological Survey of Northern India*, Vol II, page 21.

† Another anachronism. Deora is the sept of the Chauhāns of which the Sirohi chief is the head, but it did not come into existence till the thirteenth century. At this time (eighth or ninth century), Jālor was held by the Paramāras, and they continued in possession till ousted by the Chauhāns at the end of the twelfth century.

the Jaisalmer State. Subsequently he proceeded to wreak vengeance on the Barāhas and subdue the Langāhas, and one of his last exploits was to capture from the Lodra Rājputs the town of Lodorva, an immense city with twelve gates, the ruins of which are still to be seen about ten miles north-west of Jaisalmer town. He was one of the most distinguished chiefs of the clan, is counted as the real founder of the Jaisalmer family, was the first to assume the title of Rāwal and, after ruling for many years, was killed while out hunting by an ambush of Chunna Rājputs. His dates cannot be given with any certainty, but if the annals be correct in saying that his son and successor, Mūnda, married the daughter of Vallabharājā Solanki of Anhilwāra Pātan (in the Baroda State), we may say that he died towards the end of the tenth century.

Mūnda suitably avenged his father's death, but he ruled for only a short time, and there is little to be said regarding his successors, Wachuji or Bachera, Dusaj, and Bijai Rāj II, except that the last named was the son of a Mewār princess and was placed on the *gaddi* in preference to two elder brothers (one of whom was Jaisal). Further, Bijai Rāj married the daughter of Siddharājā Jai Singh Solanki, and this gives us another date, for the latter ruled at Pātan from 1093 to 1143. The issue of this alliance was Bhojdeo who had only just succeeded as Rāwal when his uncle Jaisal conspired against him, but, being always surrounded by a guard of five hundred Solankis, his person was unassailable. Jaisal therefore paid a visit to the king of Ghor and, by swearing allegiance to him, obtained the loan of a force to dispossess his nephew. Lodorva was encompassed and sacked, Bhojdeo was slain in its defence, the Musalmān army marched away with the spoils, and Jaisal became Rāwal. Lodorva was, however, ill-adapted for defence, so Jaisal sought for a stronger place and found it ten miles to the south-east, where he laid the foundation of the fort and city of Jaisalmer in 1156. He survived the change of capital only twelve years and was succeeded by his younger son Sālivāhan I, who is said to have married the sister or daughter of Mān* Singh Deora of Sirohi. While he was absent on this business, his son by another wife, Bijal, usurped the *gaddi* and, on his father's return, declined to vacate it, whereupon Sālivāhan retired to Deorāwar and was subsequently slain there repelling an irruption of the Baluchis. Bijal, however, did not rule long; having in a fit of passion struck his foster-brother, at whose instigation he had originally usurped power, "the blow was returned, upon which, stung with shame and resentment, he stabbed himself with his dagger." The next chief was Kailan, the elder brother of Sālivāhan, who had been expelled from the State in the time of his father Jaisal but was now recalled and installed at the age of fifty years. He is said to have defeated Khizr Khān Baloch and to have ruled for nineteen years. His successors, Chāchikdeo I and Karan Singh I, were engaged in

Rāwal Jaisal.

*If this is correct, the date of the foundation of Jaisalmer must be wrong, for Mān Singh's father is known to have been alive in 1249. Moreover, the Deora sept did not then exist as it takes its name from Mān Singh's son, Deorāj.

constant broils with their neighbours, amongst whom were the recently arrived Rāthors who had settled in the land of Kher at Jasol and Bālotra, while Karan Singh's son, Lākhan, was apparently a simpleton who, when the jackals howled at night, enquired the cause and, on being told that it was from the cold, ordered quilted coats to be prepared for them. As the howling still continued, although he was assured his commands had been obeyed, he caused houses to be built for them in his game preserves *(ramnas)*. He was allowed to rule for four years when he was replaced by his son, Pūnpāl, who, however, possessed such an ungovernable temper that the nobles deposed him and placed his great-uncle, Jet Singh I, on the *gaddi*.

Jet Singh.

Jet Singh was the elder grandson and heir-apparent of Chāchik-deo and, on being superseded by his younger brother, Karan Singh I, had abandoned his country and taken service with the Muhammadans of Gujarāt. He was now recalled and installed as Rāwal, and is said to have ruled from 1276 to 1294. According to the local bards, Alā-ud-dīn was king of Delhi at this time and despatched an immense army to punish the Bhātis for having carried off certain treasure which was being conveyed from Tatta and Multān to his capital. The fort of Jaisalmer is said to have been besieged for nine years and to have been captured in 1295, when Mulrāj I, Jet Singh's successor, was killed in the final *sortie*. Tod, quoting from the annals, gives a graphic account of the defence and the awful closing scenes but remarks in a foot-note:—"This can mean nothing more than that desultory attacks were carried on against the Bhāti capital. It is certain that Alā never carried his arms in person against Jaisalmer." To this it may be added that none of the Musalmān historians mention this very prolonged siege and obstinate defence, and that, if Alā-ud-dīn was king, the dates are faulty. In 1286, when the siege is said to have begun, Balban was ruling, and the Slave dynasty ended in 1290; while 1295, when the fort is supposed to have been taken, was the year in which Alā-ud-dīn Khiljī proclaimed himself Sultān.

The Musalmāns are said to have kept possession of Jaisalmer for two years and to have then abandoned the place, which remained deserted for a short time. Some Rāthors from Mewo in the Mallāni district of Jodhpur attempted to settle there but were driven away by Dūda, a son of Jet Singh, who for this exploit was elected Rāwal and proceeded to repair the town and fort. One of his sons, Tilak Singh, was renowned for his predatory exploits; he extended his raids to Abu and Jālor and even carried off the stud of Alā-ud-dīn from the Anāsāgar at Ajmer. This last insult provoked another attack on Jaisalmer, attended with the same disastrous results; again the females were destroyed, and Dūda, with Tilak Singh and seventeen hundred of the clan, fell in battle in 1306. The next chief was Gharsi, a nephew of Mulrāj I, who had been captured at the first siege and taken to Delhi where, by his courage and gallant bearing, he gained the king's favour and obtained a grant of his hereditary dominions, with permission to re-establish Jaisalmer; he is said to have been

assassinated about 1335 by some relations of his predecessor, Dūda, and was succeeded by his brother, Kehar II, who ruled in peace for about sixty years. Of the thirteen chiefs who followed him the annals tell us very little ; their names were (1) Lachhman, (2) Bersi, (3) Chāchikdeo II, (4) Devī Dās, (5) Jet Singh II, (6) Karan Singh II, (7) Lūnkaran, (8) Māldeo (or Baldeo), (9) Har Rāj, (10) Bhīm, (11) Kalyān Dās, (12) Manohar Dās, and (13) Rāmchandra. An inscription, dated 1448 in a temple at Jaisalmer, tells us that the third of the above, Chāchikdeo, was ruling in that year. The seventh (Lūnkaran) opposed Humāyūn in 1541 when on his way to Ajmer *viâ* Jaisalmer and Nāgaur or, as the *Tabakāt-i-Akbarī* puts it, "he shamefully took an unmanly course. He sent a force to attack the small party of the emperor on the march, but it was defeated and driven back with loss. Humāyūn had a great many wounded." In the sixteenth century we hear of the Turkoman governor of Umarkot, under the Arghūn dynasty, marrying the daughter of a chief of Jaisalmer, and the son of this marriage was Khān-i-Zamān, a distinguished general of his time in Sind, which was then on friendly political terms with Jaisalmer. The *Beg-lār-nāmah* mentions the deputation of Khān-i-Zamān on a mission to Rāwal Har Rāj with a robe of honour from Mirza Jān Beg of Sind. The name of Rāwal Bhīm appears in the *Ain-i-Akbarī* in the list of *mansabdārs* (commanders) of 500, and Jahāngīr* described him as "a man of rank and influence. When he died, he left a son two months old who did not live long. Bhīm's daughter had been married to me when I was prince, and I had given her the title of *Malikah-i-Jahān*. This alliance was made because her family had always been faithful to our house." Rāwal Bhīm married the niece of Rājā Sūr Singh of Bīkaner and, shortly after his death, the Bhātis killed his infant son, on which Sūr Singh swore that no Bīkaner chief's daughter should again go to Jaisalmer, an oath which has been held binding by his successors. Bhīm was followed on the *gaddi* by his brother Kalyān Dās, about the year 1624. According to the *Ain-i-Akbarī*, he had been appointed governor of Orissa in 1610, while the *Tuzak* states that he was made a commander of 2,000 (1,000 horse) about six years later. Jahāngīr writes that he "called him to court in 1626, invested him with the *tīka*, and made him Rāwal." Of the next two chiefs, Manohar Dās and Rāmchandra, nothing is known except that the former was the son of Kalyān Dās.

Sabal Singh, 1651—61.

We now come to Sabal Singh, a great-grandson of Rāwal Māldeo and a contemporary of Shāh Jahān. Tod says that he was "the first prince of Jaisalmer who held his dominions as a fief of the empire," but this does not accord with what Jahāngīr has written. He appears to have been related to the Kishangarh family, his aunt having been married to Rājā Kishan Singh, and he is said to have served with distinction at Peshāwar, where on one occasion he saved the royal treasure from being captured by the Afghān mountaineers. As a reward for tbis exploit and because he was a favourite of the

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* See *Tuzak-i-Jahāngīri*, page 159.

Rājput chiefs who were serving there with their contingents, Shāh Jahān ordered that he should be installed as ruler of Jaisalmer although he was not the legitimate heir to the *gaddi*. The State had now arrived at the height of its power; the territory extended north to the Sutlej, comprised the whole of Bahāwalpur westward to the Indus, and to the east and south included many districts subsequently annexed by the Rāthors and incorporated in Jodhpur and Bīkaner. But from this time till the accession of Mulrāj II in 1762 the fortunes of Jaisalmer rapidly declined, and her boundaries were wofully curtailed.

Amar Singh, 1661–1702.

Sabal Singh ruled for ten years (1651—61) and was succeeded by his son, Amar Singh, a wise and valiant chief who cleared his country of robbers and defeated an army sent against him by Anūp Singh of Bīkaner. He died in 1702 and was followed by Jaswant Singh, in whose time the districts of Pūgal, Bārmer and Phalodi were seized by the Rāthors, while the territory bordering the Sutlej was taken by Dāud Khān, an Afghān chieftain from Shikārpur. The three next rulers appear to have been Budh Singh, Tej Singh and Akhai Singh, though there is much confusion owing to constant fighting between rival claimants, first one and then another being temporarily successful. Akhai Singh ruled from 1722 to 1762 and established a mint at his capital in 1756 (the currency being called after him Akhai Shāhi); but he lost another portion of his dominions, namely Deorāwar and the tract in the vicinity called Khādal (the earliest of the Bhāti conquests in the desert), to Bahāwal Khān, son of Dāud Khān and founder of the Bahāwalpur State.

Akhai Singh, 1722–62.

Mulrāj II, 1762–1820.

Mulrāj II succeeded Akhai Singh and ruled for fifty-eight years. The unhappy choice of a minister completed the demoralisation of the Bhāti principality. This man, by name Sarūp Singh, was a Mahājan by caste and a Jain by religion and, having deeply offended some of the nobles and the heir-apparent (Rai Singh), was cut down by the latter in the Rāwal's presence. Then ensued a state of anarchy, the nobles wishing to depose Mulrāj and substitute Rai Singh, the latter steadily refusing to listen to the proposal; eventually, however, Rai Singh and his partisans went into exile, while the nobles, whose estates had been sequestrated, took up their abode at Sheo and Bārmer (in Jodhpur) to the south whence, for twelve years, they devastated the country, plundering even to the gates of Jaisalmer. Rai Singh, after remaining in exile for two or three years, returned to his native city but was refused admittance and deported to the fort of Dewa (about twenty miles to the north).

Rāwal Mulrāj waited until Sālim Singh, the son of his slaughtered favourite, Sarūp Singh, was old enough to manage affairs and then made him minister. Sālim Singh appears to have been the very incarnation of evil, "uniting the subtlety of the serpent to the ferocity of the tiger." He is described as having been in person effeminate, in speech bland; pliant and courteous in demeanour; promising without hesitation, and with all the semblance of sincerity, what he never had the remotest intention to fulfil. With commercial

men and with the industrious agriculturists or pastoral communities he had so long forfeited all claim to credit that his oath was not valued at a single grain of the sand of their own desert dominion, and finally he drove out the Pāliwāl Brāhmans, who had come from Pāli in Jodhpur in the thirteenth century, were famous as enterprising cultivators and landholders, had constructed most of the *kharīns* or irrigation tanks now to be found in the country, and whose solid well-built villages still stand, deserted, to mark an era of prosperity to which it will be difficult for the State ever again to attain.

It happened that the nobles exiled with Rai Singh waylaid and captured this man on his return from a mission to Jodhpur in or about 1793, but, their hearts softening to his entreaties, they allowed him to depart uninjured. As a return for this kindness he had Zorāwar Singh, Thākur of Jhinjiniāli, who had been mainly instrumental in saving him, poisoned; he caused the castle in which Rai Singh and his wife were living to be set on fire at a time when it was impossible for them to escape, and they were burnt to death; and their children he confined at Rāmgarh in a remote corner of the desert, where he had them poisoned. He then declared Gaj Singh, the youngest but one of all Mulrāj's grandsons, to be heir-apparent and proceeded to put to death all those whose talent he had any reason to fear. The town of Jaisalmer was depopulated by his cruelty, and the trade of the country suffered from his harsh and unscrupulous measures.

Treaty with Government, 1818.

The State which, owing to its isolated situation, escaped the ravages of the Marāthās, was one of the last to be taken under British protection. The treaty is dated 12th December 1818, and by it the principality was guaranteed to the posterity of Mulrāj; the chief was to be protected from serious invasions and dangers to his State, provided the cause of the quarrel was not attributable to him, and he was to act in subordinate co-operation with the British Government. No tribute was demanded. Mulrāj died in 1820 and was succeeded by his grandson, Gaj Singh, who "was fitted, from his years, his past seclusion, and the examples which had occurred before his eyes, to be the submissive pageant Sālim Singh (the minister) required." For a short time, the latter appeared to fall in with the march of universal reformation, and this was attributed to his anxiety to have an article added to the treaty, guaranteeing the office of prime minister in his family; but seeing no hope of fixing an hereditary race of vampires on the land, his outrages became past all endurance and compelled the British Agent to report to his Government on the 17th December 1821 that he considered the alliance disgraceful to our reputation, by countenancing the idea that such acts could be tolerated under its protection. "Representations to the minister were a nullity; he protested against their fidelity, asserted in specious language his love of justice and mercy, and recommenced his system of confiscations, contributions and punishments with redoubled severity." Up to 1823 Sālim Singh constantly urged, in the name of his master, claims to territories in the possession of other chiefs, but these were rejected as the investigation of them was

Gaj Singh, 1820—46.

inconsistent with the engagements subsisting between the British Government and other States. In 1824 Sālim Singh was wounded by a Rājput, and as there was some fear that the wound might heal, his wife gave him poison! On his death the leading men of the State appeared disposed to support the cause of his eldest son who, after a ministry of a few months, had been imprisoned by Mahārāwal Gaj Singh; but on the British Government declaring that it did not intend to interfere with the just authority of the chief in the appointment or punishment of his minister, all parties returned to their allegiance and Gaj Singh, now in his twenty-third year, assumed the personal administration and by measures of a just and conciliatory nature gained great popularity with his people.

In 1829 Mahārājā Ratan Singh of Bīkaner, in violation of his treaty engagements, invaded Jaisalmer to revenge some injuries committed by subjects of the latter. Gaj Singh prepared an army to repel the invasion, and both parties had applied to neighbouring States for assistance when the British Government interfered, and, through the arbitration of the Mahārānā of Udaipur, the dispute was settled. Squabbles between Bīkaner and Jaisalmer, however, continued and had reached such a point in 1835 that a British officer was deputed to effect a reconciliation; his mission was happily attended with success. In 1838-39 the first Afghān war necessitated the despatch of British troops to join the main army by way of the Indus, and Gaj Singh's exertions to supply camels for transport purposes were such as to elicit the special thanks of Government; while in 1844, after the conquest of Sind, the forts of Shāhgarh, Gharsia and Ghotāru, which had formerly belonged to Jaisalmer, were restored to the State.

Ranjīt Singh, 1846—64.

Gaj Singh died in 1846 without male issue, and his widow adopted his nephew Ranjīt Singh who, in 1862, received the usual *sanad* guaranteeing to him the right of adoption and who died on the 16th June 1864 without an heir. His widow adopted his younger brother, Bairi Sāl, who was only about fifteen years old and refused to take his seat on the *gaddi*, giving as a reason that he thought he should never be happy as ruler of Jaisalmer. In consideration of his youth, the Government of India allowed the question to remain in abeyance and the installation to be deferred, affairs being in the meantime administered by his father, Thākur Kesri Singh. Within sixteen months Bairi Sāl had outgrown his scruples and was formally installed as Mahārāwal on the 19th October 1865; his father continued as minister for four years when he died and was followed by his elder brother, Chhatar Singh, who, though respected by all classes, was not of the same determined character, nor was he so much feared by the plundering Bhātis. In 1870 an extradition treaty was concluded with this State by the Government of India (followed in 1887 by the usual modifying agreement); in 1873 the chief married a daughter of the Mahārāwal of Dūngarpur; and in 1879 he entered into an agreement with Government by which he undertook to limit the local manufacture of salt to 15,000 maunds a

Bairi Sāl, 1864—91.

year solely for consumption and use within his territories, and to abolish all dues on British duty-paid salt.

Sālivāhan II, 1891 to date.

Mahārāwal Bairi Sāl, who had been ailing for some time and whose illness had rather stood in the way of reform, died on the 10th March 1891 without an heir. His widows adopted Syām Singh, son of Thākur Kushāl Singh of Lāthi, and the choice being confirmed by the Government of India, Syām Singh succeeded and took the family name of Sālivāhan. He was born on the 12th June 1887, was a student at the Mayo College at Ajmer from 1894 to 1906, and was married to the daughter of the Mahārao of Sirohi in February 1907. During his minority the administration is being conducted by a *Dīwān* and Council under the general superintendence of the Resident, Western Rājputāna States. The principal events of the last fifteen years have been the famines and scarcities which have caused a great falling-off in the population and the revenues and the accumulation of a large debt, and have hampered the efforts of the two capable officials, Jagjīwan and Lakshmī Dās, who have successively held the post of *Dīwān*. The Mahārāwals of Jaisalmer are entitled to a salute of fifteen guns.

Archæology.

Of objects of antiquarian interest no very reliable account exists. According to Thornton, the town of Birsilpur in the extreme north-east was founded in the second century; the place is now included in the estate of one of the first class nobles and possesses a fort of no great strength. Tanot, the first desert-capital of the Bhātis, lies in the north-west corner and has a fort and temple dating from the eighth century. Lodorva, the ruins of which still exist about ten miles north-west of Jaisalmer town, was the Bhāti capital from the end of the tenth to the middle of the twelfth century; it was taken by Rāwal Deorāj from the Lodra Rājputs, a branch of the Paramāras, in whose time two temples, one to Mātā and the other to Pārasnāth, are said to have been constructed; these buildings, which are in every-day use, would therefore be at least 950 years old. The fort of Devīkot in the south-west has a Hindu temple of nearly the same age, while at the village of Sirwa in the vicinity is a building with thirty-two pillars said to have been erected in 820 A.D. and now much out of repair. The objects of interest at the town of Jaisalmer are noticed in Chapter VI below.

CHAPTER III.

THE PEOPLE.

Population in 1881, 1891 and 1901.

The population at each of the three enumerations which have been made was :—108,143 in *1881;* 115,701 in *1891;* and 73,370 in *1901.* The increase during the first of these decades was nearly seven per cent., or about normal, while the decrease of more than thirty-six per cent. since 1891 was due to a series of indifferent seasons culminating in the famine of 1899-1900, in the course of which many people emigrated and a considerable number died from cholera. The decrease among males and females was about the same, namely, thirty-seven per cent. among the former and nearly thirty-six among the latter. Taking the population by religion, we find that Animists (who, however, have never been numerous) lost sixty per cent., Musalmāns 36½, Hindus 35½ and Jains more than twenty-two per cent.

Density.

Jaisalmer is by far the most sparsely populated State in Rājputāna, the density per square mile having been 6·73 in *1881,* 7·20 in *1891,* and 4·57 in *1901.* In the districts, or *hukūmats* as they are called, the density varies considerably; thus Kishangarh in the north with an area of 400 square miles contained but 403 inhabitants occupying 102 houses in a single village, while Lākha in the centre supported fifteen persons to the square mile.

Towns and villages.

At the last census the State was made up of one town (the capital) and 471 villages; the number of occupied houses was 17,763 and the average number of persons per house was 4·13. The capital contained 7,137 inhabitants, or about 9·7 per cent. of the total population, who were living in 2,071 houses. The villages have decreased in number as the population has increased, and *vice versâ* (see Table No. VI in Vol. III-B), but this was perhaps due to some difference in the definition of the term "village" at each census. There is only one village to every thirty-four square miles of country; the Kishangarh and Tanot *hukūmats,* the areas of which are respectively about 400 and 300 square miles, possess a single village each, while at the other extreme is the Shāhgarh-Ghotāru *hukūmat,* with one hundred villages spread over an area of about 1,600 square miles. Again, taking the State as a whole, each village contains on an average thirty-three houses and 140 inhabitants.

Migration.

Of the 73,370 persons enumerated in 1901, ninety-two per cent. were born in the State, more than five per cent. in Jodhpur, one per cent. in Bīkaner, and the majority of the remainder hailed from either Sind or Bahāwalpur. Jaisalmer received from other States in Rājputāna 4,974 persons and gave them in return 1,203 persons, thus gaining 3,771 persons, the majority of whom were females who had married and settled here. In its transactions with Provinces and States of India outside Rājputāna, Jaisalmer, however, lost heavily,

for while immigrants numbered only 806, emigrants numbered at least 36,591 * and were found chiefly in Sind and Bahāwalpur. This was entirely in accordance with expectations, for emigration is an annual event in these parts where there is practically only one crop a year, namely, that sown in the rains and gathered in September or October; moreover, it was known that very† many had left the State during the disastrous famine of 1899-1900 and had not returned by the date (1st March 1901) on which the last census was taken.

Vital statistics.

The registration of births and deaths was started both at the capital and in the districts in 1893, but the statistics are not altogether reliable, especially in the rural area. During the nine years ending 1901, the average annual number of births registered in the entire State was 2,291, and of deaths 2,358; in the year 1900 (a particularly unhealthy one) only 1,126 births and as many as 6,324 deaths were recorded, and if we assume the population to have been the same as in 1901, these figures give ratios of about fifteen and eighty-six per mille respectively. During the four years ending 1905, the average annual number of births registered has been 1,333, and of deaths 1,123; or, in other words, the birth-rate has averaged eighteen, and the death-rate fifteen per mille. Eliminating the districts, where the procedure is certainly faulty, the annual birth-rate at the capital during the last four years averages nearly forty, and the death-rate thirty per mille.

Diseases.

Epidemics are of rare occurrence. The people suffer chiefly from mild malarial fever, pneumonia and bronchitis in consequence of their scanty clothing, or from diseases of the skin, guinea-worm and smallpox. There is a saying that neither mud, mosquitoes nor malaria are to be found in these regions, and malarial fevers are certainly not so severe as in other parts. Smallpox is less common than it used to be, and cholera was quite unknown till December 1899, when it broke out in the north-east, reached the capital in June 1900 and thence extended to the districts generally, but it died out in September after claiming some three or four thousand victims, and has not reappeared. Plague is fortunately still a stranger.

Infirmities.

The number of afflicted persons fell from 296 in *1891* (239 blind, forty-four insane and thirteen lepers) to 58 in *1901* (forty blind, sixteen deaf-mutes and two insane); the decrease in the number of the blind is perhaps due to vaccination operations, but the recent famines have probably carried off most of the infirm.

Sex and age.

At the last census about 53·7 per cent. of the people were males, but the percentage of females to males has been steadily increasing during the past twenty-five years, having been about seventy-seven in 1881, eighty-four in 1891, and eighty-six in 1901. Taking the population by religion, we find that in 1901 nearly fifty-three per cent. of the Hindus and fifty-six per cent. of the Musalmāns and

*A large number of persons enumerated outside the Province gave their birthplace as Rājputāna, without mentioning any particular State; some probably belonged to Jaisalmer.

† Estimated at the time at from 40,000 to 50,000.

Animists were males, and it is only among the Jains that females predominated, forming fifty-three per cent. of the total number. Statistics relating to age are in no part of India very accurate, but, such as they are, they show the Musalmāns to live longest, 5·7 per cent. of them being sixty years of age or more; the similar figures for Hindus, Animists and Jains were 4·8, 4·4 and 3·2 per cent. respectively. Again, the women are longer lived than the men, especially among the Jains and Hindus; the excess of boys over girls under five years of age does not necessarily point to female infanticide which, though common in former days, is believed not to be now practised.

Civil condition.

In 1901 more than fifty-one per cent. of the people were returned as unmarried, about thirty-five as married, and over thirteen per cent. as widowed. Of the males, about sixty-three, and of the females thirty-eight per cent. were single; there were 1,133 married females to 1,000 married males and 2,863 widows to 1,000 widowers. The relatively low proportion of unmarried women and the high proportion of widows are the results of the custom which enforces the early marriage of girls and discourages the remarriage of widows. Polygamy is said to be rare, and the excess of wives over husbands is ascribed chiefly to many married men having temporarily left the State. Among the males, thirty-four per cent. of the Musalmāns, thirty-seven of both Hindus and Animists, and thirty-nine per cent. of the Jains were married or widowed, while for females the similar percentages were:—Musalmāns fifty-six, Animists fifty-eight, Hindus sixty-three and Jains sixty-five. Early marriage prevails to some extent, especially among the Hindus and Animists. Of every 1,000 children under ten years of age, thirteen were married or widowed, and of every 1,000 girls under the same age, twenty-four were wives or widows; again, five per cent. of the children, and nine per cent. of the girls, under fifteen years of age were married or widowed. Polyandry is unknown, and divorce, though permissible, is seldom resorted to.

Language.

The language spoken by eighty per cent. of the people is Mārwāri, one of the four main groups of Rājasthānī; the variety most met with in Jaisalmer is that known as Thalī or the western Mārwāri of the desert. Another fourteen per cent. of the people speak Sindī, the most common dialect being called Tharelī. According to the census returns, a further four per cent. speak Jaipurī, another of the four main groups of Rājasthānī, but the State authorities point out that this is an error, and that Dhātī or *Dhāt-kī-bolī*, which is a form of Sindī and is said to take its name from the country around Umarkot which was formerly called Dhāt, should be substituted.

Castes and tribes.

Of castes and tribes the following were most numerous at the last census:—Rājputs (31,313 or about 42½ per cent. of the total population); Chamārs (8,883 or twelve per cent.); Sheikhs (5,569 or 7½ per cent.); Mahājans or Baniās (5,248 or seven per cent.); and Brāhmans (3,710 or five per cent.).

Rājputs.

More than one-third of the Rājputs are converts to Islām who, though found in every district, reside chiefly in the western half of the State and still retain many of their anicent customs and ideas. The Hindu Rājputs belong mostly to the ruling clan, Bhāti, but there are a good many Rāthors, and the Chauhāns, Sesodias, Solankis, etc., are all represented. In olden times the Bhātis, from their chief downwards, were famous for their plundering propensities; their looting of the royal treasure and their carrying off of Alā-ud-dīn's horses may be mentioned as instances. Within the last forty years, they have been described as a roving predatory class, committing dacoities in their own territory and in the neighbouring States; mounted, as they were, on swift camels and connected by marriage with numerous Rāthor families across the eastern and southern borders, with whom, when followed up, they found shelter, it was difficult to capture them red-handed. But though complaints against them are still received, it is believed that they have largely settled down as respectable subjects and are not quite so black as they are usually painted.

Chamārs, etc.

Of the other castes mentioned above, the Chamārs are workers in leather, village servants and to some extent agriculturists; the Sheikhs, many of whom are Hindu converts, follow trade and cultivate land; the Mahājans, mostly of the Mahesrī and Oswāl divisions, are money-lenders and traders; and the Brāhmans, who are priests, shopkeepers and in the service of the State, belong chiefly to the Pushkarna, Srīmāli, Joshī and Purohit sects.

Religions.

In 1901 nearly seventy-one per cent. of the people were Hindus, more than twenty-five per cent. Musalmāns, two per cent. Animists, and about 1½ per cent. Jains; there were also a couple of Sikhs and one Aryā. The various sects of the Hindus were not recorded, but the Sāktas or worshippers of the female energy *(sakti)* of the primordial male, Purusha or Siva, are said to be most numerous. The Muhammadans were all Sunnīs; the Animists all Bhīls of the village or cultivating class, having little or nothing in common with their wilder brethren who inhabit the hills in southern Rājputāna and being for all intents and purposes Hindus; while nearly ninety-nine per cent. of the Jains were of the Swetāmbara sect, the remainder being Dhūndias.

Occupations.

Rather more than 36¼ per cent. of the people returned some form of agriculture as their principal means of subsistence, and a further nine per cent. were partially agriculturists. The industrial population amounted to nearly 43½ per cent., the provision of food and drink giving employment to twenty-four per cent. and the weaving of cotton to about ten per cent., while seven per cent. were workers in leather. The commercial classes, such as money-lenders, general merchants and shopkeepers, formed 6·75 per cent., and the professional classes 2·60 per cent. The people generally lead a wandering life and are by nature hardy and healthy; many of them keep herds of camels, cattle, sheep and goats, and migrate regularly to Sind and Bahāwalpur in the cold weather.

Food, dress and dwellings.

The staple food of the masses is *bājra*, and of the well-to-do wheat or barley; milk enters largely into the diet of the people, and tobacco is in general use but has to be imported. Not much liquor is drunk, but a good deal of opium is consumed both as an occasional beverage and by *habitués* of the drug. Vegetables are scarce, the chief source of supply being the *khejrā* tree. As in the desert parts of Jodhpur, during times of scarcity, many subsist on the roots and seeds of grass or the fresh bark of the tree just mentioned, while locusts are much prized as an article of diet, both in the fresh and preserved state. In the matter of dress, there is nothing particular to record; the majority are very poor, dress simply and cannot afford ornaments for their women. Their dwellings are usually circular huts, but here and there fine stone houses, some of which exhibit considerable ornamentation, are to be found. These houses were built by wealthy merchants, mostly Pāliwāl Brāhmans, to whom, in the old days, Jaisalmer was a favourite retreat, being remote from the scenes of war and exactions in the times of the Mughals, Marāthās and Pindāris.

Disposal of dead.

The Hindus mostly cremate their dead, but infants who die before leaving their mother's breasts are buried, as also are Sanyāsis, Gosains, Kābīrpanthīs, Bishnois and Nāths. The Musalmāns always practise inhumation.

Games and amusements.

Of games and amusements there is no great variety. The camel is ridden for pleasure as well as to accomplish journeys, and the riders often race against each other. Other amusements are dancing parties and musical entertainments, the instruments used being the *sārangi* or fiddle and the *tabla* or drum. Among the younger generation, popular games are *tāngal*, so called because all the players have to stand on one leg, and *kūndo*, a kind of hockey. In the first of these games each player has to hold his left foot in his right hand, and the leader of one party, shielded by the rest of his side, has to endeavour to hop across a line marked on the ground while the other party attempt to stop him; there is much charging and buffeting with the left hand on either side, and if any one loose hold of his left foot, he has to retire from the contest which continues till the leader has crossed the boundary or till he and the rest of his side have been disqualified.

Nomenclature.

There is nothing peculiar in the system of nomenclature. The upper classes usually have two names, the first being of religious origin or given out of affection or fancy, and the second being representative of the caste or clan; for example, the Rājput's second name is usually Singh, the Brāhman's will be Mal or Karan or Prasād, the Mahājan's Lāl or Dās, etc. Among the lower classes there is generally one name, a diminutive of that of a higher class, *e.g.* Udā from Udai Singh, Birdhā from Birdhī Chand, and the like. In the names of places, the most common endings are :—*āla*,—*wāla* and—*wāli*, all meaning town, village or habitation;—*garh* (fort); and—*sar* (lake).

CHAPTER IV.

ECONOMIC.

AGRICULTURE. General conditions.

The soil is for the most part light and sandy, and, as the rain sinks in and does not flow off the surface, a small rainfall suffices for the crops. In the north-east round Bāp and Bīkampur, and in some districts adjacent to the capital, the soil is firmer and the storage of water becomes possible, but, speaking generally, only rain crops are grown, while in the Tanot, Kishangarh and Bārāwa-Buili *hukūmats* in the north-west and north and in Shāhgarh-Ghotāru in the west, there is practically no cultivation whatsoever. The system of agriculture is everywhere rude, and the implements are all of the old-fashioned variety. When the rains begin, the sandy land is ploughed by camels and the harder soil by bullocks; the seed is sown broadcast and, after it has sprouted, a few showers at long intervals bring it to maturity. The ploughs are light and merely scratch the surface, and, as the camels move quickly, it is possible for each cultivator to put a considerable area under crop. No agricultural statistics are available, but in ordinary years a good deal of cultivation goes on in the rains, and it is estimated that in favourable seasons (which are few and far between) the produce is just about sufficient for the immediate wants of the people.

Population dependent on agriculture.

Nearly 28,000 persons were returned in 1901 as dependent on pasture and agriculture, or about thirty-eight per cent. of the total. The actual workers included in these groups numbered twenty-six per cent. of the male population of the State and three per cent. of the female. In addition to these, about 6,600 persons recorded agriculture as a subsidiary occupation. Non-workers or dependents—chiefly women and children—formed twenty-three per cent. of the total population and as much as sixty per cent. of the population supported by agricultural labour.

Principal crops.

The principal *kharīf* or autumn crops are *bājra* or spiked millet *(Pennisetum typhoideum)*, *jowār* or great millet *(Sorghum vulgare)*, the creeping pulses, *mūng (Phaseolus mungo)* and *moth (P. aconitifolius)*, and *til* or sesame *(Sesamum indicum)*. Of these, *bājra* is the most important; it is sown as early as possible, takes about three months to ripen, and the average yield per acre is estimated at 1½ cwt. provided the rainfall has been good and timely. *Jowār* is sown about the same time, takes a little longer to ripen, and yields about 2¼ cwt. per acre. The pulses are usually sown later and ripen in some six weeks if the rainfall be sufficient, while *til* is grown sometimes by itself and sometimes mixed with *bājra* or *jowār* and ripens in October or November. Tod mentions cotton as being "produced in the same soil as *bājra*," but it is not now cultivated. The *rabi* or spring crops are grown only in those parts where

artificial irrigation is possible, and consequently not on a large scale; they consist of wheat, gram and, very occasionally, a little barley. Under favourable conditions the average yield of an acre sown with wheat or gram is said to be nearly six cwt.

Use of manure.

Very little use is made of manure, but the cattle are sometimes penned in the fields so that their excreta may not be lost.

Live stock.

The wealth of the rural population consists almost entirely in their herds of camels, cattle, sheep and goats which thrive in spite of the arid nature of the country. The camels are looked on more as members of the family than dumb animals; they plough and harrow the ground, bring home the harvest, carry wood and water, and are both ridden and driven. Their milk is used as an article of diet and as a medicine; their wool is sold; and when they die, their skin is made into jars for holding *ghī* and oil. The Jaisalmer camels are famed for their easy paces, speed and hardiness, and can go long distances without food or water, subsisting for days on a little unrefined sugar and sulphate of alum, which are carried in the saddle-bags. The best of the breed are smaller and finer in the head and neck than the ordinary camel of western Rājputāna, and will cover from eighty to one hundred miles in a night when emergency demands speed. Prices range from Rs. 60 to Rs. 300. Cattle, goats and sheep are extensively bred, and are of a good class; many of the bullocks are exported to Sind and Gujarāt. Goats supply the great bulk of the animal food of the country, and their milk is in general use as an article of diet; sheep, on the other hand, are kept chiefly for their wool, but large numbers are exported and, though small, fatten well and, when carefully fed, yield excellent mutton. The average prices of the various animals are (in British currency):—female buffalo Rs. 50; bullock or cow Rs. 30; male buffalo Rs. 10; and sheep or goat Rs. 3 to Rs. 7, according to age.

Pasture grounds.

In years of good rainfall there is an abundance of pasturage, the Pāli jungles in the north and *bīrs* in other parts producing excellent grasses; but the difficulty of water is almost always present, for where it exists, it is generally bad. In adverse seasons the cattle are taken away to more favoured places.

Irrigation.

Some eighty years ago, any attempt to water the land for the production of spring crops was viewed as a crime and punished accordingly, the generally accepted idea being that Providence would supply the wants of the country and to supplement the efforts of nature was wrong. This superstition, which was probably started by the notorious minister, Sālim Singh, in order to ruin the Pāliwāl Brāhmans who, generations before, had spent large sums of money on the construction of *kharīns*, has of course long exploded. Irrigation on any large scale is, however, impossible as no perennial streams exist, the wells are too deep to be used for this purpose, the country is for the most part sandy, and the rainfall is always scanty. It is only where the soil is harder and the surroundings hilly and rocky that irrigation becomes possible from *kharīns* or shallow depressions into which the rain-water flows. In a very few cases

the water thus stored is conveyed by ducts to adjacent land, but the usual custom is to sow wheat and gram in the beds of these tanks.

As already observed, the majority of the *kharīns* were constructed by the Pāliwāl Brāhmans, and from the time when these people were driven out of the State until 1892 they were entirely neglected and fell into disrepair. During the last fourteen years, the Darbār has done much to restore them and to build new ones, and the total expenditure has been approximately Rs. 82,000; some of the people have also been persuaded, by a promise of the right of cultivation and some reduction in the land revenue, to construct several of these useful irrigation works at their own cost, and to agree to keep them in good order. The result is that there are at the present time more than 500 *kharīns* in the State, of which nearly 400 are used for cultivation in years of sufficient rainfall; the principal are Bhūj and Masūrdi to the south-west of the capital, Dāiya to the north-west, and Mānchitia near Bāp in the north-east. The *kharīns* have never been surveyed, but the area of their beds and of land in the vicinity irrigable from them has been roughly estimated at about 30,000 acres or forty-seven square miles. The area actually sown with spring crops is, of course, much less and depends on the rainfall at each tank.

RENTS. Rents in the proper sense of the term do not exist in the *khālsa* villages; the Darbār deals directly with the cultivators and collects its land revenue without the intervention of any middleman. In *jāgīr* estates and in those held as charitable grants (*sāsan*), the holders take as rent either a share of the produce, varying from one-fifth to one-eleventh, or a sum of Rs. 2 (local currency) for as much land as can be cultivated with a pair of bullocks.

WAGES. Wages appear to have remained almost stationary during the last thirty years, and are still often paid partly or wholly in kind, especially in the cases of village artisans, agricultural labourers, domestic servants, and the horsekeepers or syces employed by the Darbār. At the present time the average monthly wages (converted into British currency) are:—ordinary labourer Rs. 3 to Rs. 4; syce Rs. 4; domestic servant Rs. 5; and mason or carpenter about Rs. 10, although skilled workmen receive more than this.

PRICES. Of prices in olden days not very much is known. Tod, some seventy-five years ago, wrote:—"*Bājra*, in plentiful seasons, sells at one and a half maunds" (*i.e.* sixty seers) "for a rupee; but this does not often occur, as they calculate five bad seasons for a good one." In 1865 the price of *bājra* was from 8 to 9 seers per rupee, and ten years later it was reported to be 27 seers against an average for the preceding decade of 13½ seers. Table No. VIII in Vol. III-B gives the average price of certain food grains and salt since 1884, and the figures have been taken from the official publication entitled *Prices and Wages in India*; it should be remembered that the period 1891—1900 included not only two years of famine (1899-1900), which have been left out of account, but three years of scarcity. Nevertheless food grains seem to be on the whole dearer than they were sixteen or twenty years ago, and the railways, though they flank

the State on every side, are not sufficiently near to materially affect prices. In the famine of 1899-1900 the highest quotations were: wheat and gram 7 seers, *jowār* 7¾ seers, and barley and *bājra* 8 seers per rupee.

MINERALS.

The mineral products of Jaisalmer consist of salt, limestone, sandstone, *kankar* and clay.

Salt.

Salt of fair quality is found in several localities, but is now manufactured only at Kānod, about twenty miles north-east of the capital. This *rann* or salt-marsh lies at the head of a rocky valley, separating the stony desert from the sandy and waterless one which extends northward to the Bahāwalpur State, and has an area of about twelve square miles. Brine is found ten feet below the surface, and is drawn from pits by the weighted pole and bucket; it is then exposed to evaporation in pans, and a small-grained white salt is obtained. By the agreement of 1879 with the Government of India the out-turn is limited to 15,000 maunds (or about 540 tons) a year, entirely for local consumption and use, and the quantity actually manufactured is said to average about 300 tons yearly.

Limestone.

The limestone of Jaisalmer has for centuries been famous, and was used for some of the elaborate inlaid work of the Tāj Mahal at Agra. The quarries are mostly within a few miles of the capital, and the stone is very fine, even-grained and compact, of a buff or light brown colour, and admirably adapted for carving. Slabs have been transported to Upper Sind and used for Musalmān tombstones, and these, although of considerable antiquity, are generally remarkable for the sharpness of the engraving. One variety of limestone was formerly employed for lithographic blocks and, though not suited for fine chalk drawings, could be used, it was said, for all other purposes with the ordinary materials; its composition was reported to be 97·5 per cent. of calcium carbonate and 2·5 per cent. of a yellow earth resembling bole, and it took a fair polish. Another variety called Abur or Hābur from the village (twenty-eight miles north-west of the capital) where it is quarried, contains large quantities of an iron ore resembling red ochre and is used for flooring the most sacred parts of temples.

Sandstone.

Sandstone of good quality is found near Jaisalmer town and at Bhadāsar seventeen miles to the north-west; it is worked chiefly at the latter place where it is of a reddish brown colour and, being very hard, is used for making millstones.

Clays.

The clays consist of fullers' earth or *Multāni mitti*, quarried at four places—Māndhan, Mandai, Nedai and Rāmgarh—in the north, used locally as a hair-wash and exported to some extent for the manufacture of the better grades of pottery; *geru*, found in small lumps in the south-east, yellow in colour and used for dyeing tents and clothes; and *seri mitti*, also found in the south-east and used as a whitewash.

The average yearly out-turn of limestone is reported to be about 1,100 tons; of sandstone 200 tons; and of the various clays 400 tons.

The manufactures are unimportant and consist of coarse cotton cloths; woollen shawls or *loīs*, of fine texture and good quality, and blankets; small bags and druggets of goats' and camels' hair; and cups, platters and paper-weights of the limestone of the country. MANUFACTURES.

In former times the town of Jaisalmer, from its position on the direct route between the valley of the Indus on the west and the Punjab and United Provinces to the north and east, was a commercial mart of some importance. Caravans of camels were constantly passing through the State, carrying the indigo of the Doāb, the opium of Kotah and Mālwā, the famed sugar-candy of Bīkaner, and iron implements from Jaipur to Shikārpur and lower Sind, and returning with ivory, dates, cocoanuts, drugs, scented wood and dried fruits. Tod writes that the transit-duty levied on these goods at one time reached three lakhs of rupees a year, but the bad faith of the minister, the predatory habits of the Bhātis and the general decrease of commerce conspired to almost annihilate this source of income. In the famine of 1869, which affected Jaisalmer to a small extent only, no less than 235,000 camel-loads, representing over a million maunds of grain, passed through from Sind and Bahāwalpur to Jodhpur, and a large portion of the sum for which this grain was sold (some twenty-five lakhs of rupees) was taken back through the State without a single robbery or dacoity being committed. Since then, railways have been constructed on all sides and the through trade is now insignificant, the yearly receipts from transit-duty averaging barely Rs. 2,500. COMMERCE AND TRADE.

At the present time, the trade is mostly with Sind, the chief exports being wool and woollen articles, *ghī*, camels, cattle, sheep, hides, fullers' earth and a little building stone; the imports include grain, cotton, sugar, opium, tobacco, oil and piece-goods. Export and port, as well as transit-duties, are still levied and bring in nearly Rs. 50,000 a year, import-duties accounting for about two-thirds of this sum. For the transport of merchandise, camels are almost always used, and the principal trading castes are the Mahājans, and to a less extent the Sheikhs and Brāhmans.

No railways traverse the State, but the North-Western Railway runs at a distance varying from thirty to ninety miles from the northern and western borders, while at a similar distance from the southern and eastern boundaries is the Jodhpur-Bīkaner Railway; the station nearest to the capital is Bārmer on the line last mentioned and distant about ninety-five miles nearly due south. The length of metalled roads is 6, and of unmetalled 119 miles. The former are all at or in the vicinity of the capital, while the latter are mere sandy tracks leading to Bārmer, Pokaran and other places, and sometimes marked by mile-stones. These roads and the numerous foot-paths found everywhere are passable all the year round, but where there are shifting sands, as in the west, the track is not easy to find. An Imperial post office was established at the town of Jaisalmer in March 1888 and still exists, being the only one in the State; the mails are carried by runners to and from Bārmer railway station, the journey MEANS OF COMMUNICATION.

occupying about twenty-eight hours. In the Bāp *hukūmat* in the north-east, letters are brought once a week to the village of the same name from the adjacent post office at Phalodi in Jodhpur. The Darbār maintains a small staff of camel *sowārs*, who carry letters, etc., twice a month to various parts of the country, an arrangement which sufficiently meets all requirements. The nearest telegraph office is at the railway station of Bārmer.

FAMINE. General conditions.

The State is visited by constant scarcities caused by short rainfall or damage done by locusts; indeed, hardly a year passes in which a failure of crops does not occur in some part of Jaisalmer. Yet the people suffer less than one would expect as emigration is an annual event, whatever be the nature of the season. Practically the only harvest is the *kharīf*, and as soon as it is gathered, large numbers leave every year to find employment in Sind and Bahāwalpur. Further, the inhabitants are, by nature and of necessity, self-reliant, as well as indifferent, if not adverse, to assistance from the State coffers, and many of them consider it so derogatory to be seen earning wages on relief works in their own country that they prefer migration. The Darbār, though its revenue is small, has, during recent years, done a great deal to relieve distress and in the matter of repairing and constructing reservoirs for the storage of water, but a scanty rainfall means not only no crops or indifferent ones, but also difficulty in finding water for man and beast, as well as grass and fodder; and the result is that, on the first approach of scarcity, the people leave in larger numbers than usual with their flocks and herds. Emigration, consequently, has always been, and must continue to be, the main form of relief.

History.

1891-92.

No detailed accounts are available of the famines or scarcities prior to 1891-92, but the State is said to have suffered severely in 1812-13 and to have been only slightly affected in 1868-69 and in 1877-78. Deficient rainfall in 1891 caused a more or less general failure of the crops and about three times the usual amount of emigration. Relief works were started but entirely failed to attract labour, and had to be completed by contract; a small sum was spent on gratuitous relief. Prices ruled high, namely, wheat about 8 seers, *bājra* 9 seers, *jowār* 10½ seers, and grass three maunds per rupee; and more than 13,000 head of cattle are said to have died, but they were probably the least valuable. The direct expenditure on relief was small (about Rs. 4,000), but, including remissions of land revenue and losses from sources other than land, this visitation cost the State about Rs. 68,000.

1895—97.

In 1895 the average rainfall for the whole State was 3·16 inches, and in the following year 3·46 inches; the result was a scarcity, not approaching to famine conditions, over two-thirds of the territory, the northern and western districts being worst off. In 1895-96 there was rather a deficiency of water and fodder than of grain, while in 1896-97 the reverse was the case. Relief works and poor-houses were started in December 1895 and not closed till July 1897, but the largest number on relief of either kind never quite reached 2,000 on

any one day. The price of *bājra* ranged between 8¼ and 10½ seers, and of barley between 6¼ and 10 seers per rupee, and one-fourth of the population with more than 107,000 head of cattle emigrated. The direct expenditure on this occasion was about Rs. 40,000, but the land revenue was largely remitted and the losses from other sources were considerable. The committee of the Charitable Relief Fund at Calcutta allotted Rs. 19,000 for distribution in Jaisalmer, but it is noticeable that only Rs. 7,500 were spent, almost entirely in purchasing cattle.

The famine of 1899-1900 was the worst of which there is any record; certain districts received no rain, and the average for the State was less than an inch. This was consequently a *trikāl* or triple famine, in which grain, water and fodder were alike scarce. Between forty and fifty thousand persons emigrated, and it was estimated that the State lost about 148,000 horned cattle and more than 7,400 camels. Relief works and poor-houses were open for twelve months, and during this period 410,122 units were relieved, the largest number on relief on any one day being 1,764 towards the end of May 1900. Practically no land revenue was collected, and the Government of India came to the assistance of the Darbār with a loan of half a lakh, which sum approximately represents the direct cost of the operations. This famine is remarkable for the appearance for the first time in history of cholera which, between December 1899 and September 1900, claimed from three to four thousand victims. 1899-1900

The scarcity of 1901-02, though not intense, was general, and the relief measures cost the State Rs. 14,000, to meet which a further loan from the Government of India became necessary. 1901-02.

CHAPTER V.

ADMINISTRATIVE.

ADMINISTRATION.

During the minority of Mahārāwal Sālivāhan the administration is being conducted by a *Dīwān* and Council of four members under the general superintendence of the Resident, Western Rājputāna States. The State is divided into sixteen districts or *hukūmats*, in each of which is an official termed *Hākim*. A reference to Table No. VII in Vol. III-B will show that the districts vary in size from 262 to 2,200 square miles, and that each contains on the average only about thirty villages and 4,140 inhabitants.

CIVIL AND CRIMINAL JUSTICE.

Jaisalmer has no code of laws of its own, and the courts are guided generally by the enactments of British India, such as the Civil and Criminal Procedure Codes and the Indian Penal Code.

Courts of *Hākims*, etc.

The lowest courts are those of the *Hākims*; fourteen of them have powers in civil suits not exceeding Rs. 250 in value and, as magistrates, can punish with imprisonment up to fifteen days and fine up to Rs. 50, while the remaining two (at Bāp and Nokh), as well as the *Kotwāl* at the capital, try civil suits not exceeding Rs. 400 in value and can pass a sentence of one month's imprisonment and Rs. 50 fine. Appeals against the decisions of the above tribunals lie to the *Sadr* Civil or the *Sadr* Criminal court, as the case may be. Most of the smaller civil suits are referred to a *panchāyat* of three or more members appointed by the parties concerned, the award being final, or, if the parties cannot agree, to a body known as a *sultāni panchāyat* and nominated by the presiding judge (*Hākim* or *Kotwāl*), but in these cases the award is not final and an appeal is allowed to the *Sadr* Civil court.

Sadr Civil Court.

The court last mentioned tries suits beyond the powers of the *Hākims* and *Kotwāl* and up to any value, but appeals lie to the *Dīwān* and decrees for sums exceeding Rs. 5,000 are subject to the confirmation of the Resident. Here again many of the cases are decided by arbitrators chosen by the parties, and their award is final.

Sadr Criminal Court.

The *Sadr* Criminal court takes up cases beyond the powers of the *Hākims*, etc., and can sentence to imprisonment up to one year and fine up to Rs. 300; if a heavier punishment be deemed necessary, the proceedings are submitted to the *Dīwān*, to whom also appeals lie.

Dīwān's court.

The *Dīwān*, besides hearing appeals against the orders of the *Sadr* Civil and Criminal courts, tries such original cases as are beyond the powers of the latter and can sentence up to two years' imprisonment and Rs. 500 fine; sentences exceeding these limits and all sentences in cases of homicide and dacoity are subject to the confirmation of the Resident.

Resident's Court.

The court of the Resident is the highest in the State; besides dealing with such cases as require its confirmation, it can call for the proceedings in any case and revise the orders passed.

The work of the courts is not heavy. During the ten years ending 1900, the average annual number of original civil suits decided was 268 (of which 250 were dealt with by subordinate courts), while the figures for 1903-04, 1904-05 and 1905-06 were 290, 409 and 387 respectively. The number of criminal cases disposed of was 251 in 1903-04, 320 in 1904-05, and 532 in 1905-06, as compared with a yearly average of 473 during the decade ending 1900.

FINANCE. In former times.

Of the revenue of the State in former times very little is on record. Tod wrote that the personal revenue of the chief "is, or rather was, estimated at upwards of four lakhs of rupees," the chief sources being transit-duties which, it is asserted, "have amounted to the almost incredible sum of three lakhs," and land revenue; while a hearth-tax called *dhuān* (literally "smoke"), levied from every house, brought in about Rs. 20,000, and an arbitrary impost "universally known and detested under the name of *dind*, the make-weight of all their budgets of ways and means" contributed anything between Rs. 2,700 and Rs. 80,000. The yearly revenue of the nobles was roughly estimated by Tod at about two lakhs.

When the Governor-General's Agent visited Jaisalmer in 1865 to instal the late Mahārāwal, detailed accounts of the income and expenditure of the State for the previous three years were handed to him and, though probably not very reliable, showed the average revenue to be about Rs. 1,06,000 and the expenditure about Rs. 1,22,000 a year. The chief sources of income were customs-duties, land revenue, judicial fees, minting operations and a tax on houses; while the main items of expenditure were cost of administration, including civil list, Rs. 60,000, and army and police Rs. 45,000. The debts exceeded the assets by about a lakh, this sum being due partly to merchants and partly to the troops who received half of their pay monthly and the other half in arrears every third or fourth year.

Income and expenditure since 1865.

During the next twenty-five years (1865—90), the ordinary revenue appears to have ranged between one and two lakhs a year and the expenditure usually exceeded the income, with the result that when Mahārāwal Bairi Sāl died in 1891 the debts, including arrears of pay, were found to amount to about $3\frac{3}{4}$ lakhs. All these figures are in the local currency, the rupee of which was at that time of about the same value as the similar British coin. In the succeeding decade the ordinary revenue averaged Rs. 1,57,000 in the local currency, which had greatly depreciated in exchange value, but a series of bad or indifferent seasons commencing from 1895 has not only reduced the receipts, particularly under customs and land revenue, but has necessitated much extraordinary expenditure, to meet which the Darbār has had to borrow money from the Government of India and in the open market.

Present state of finances.

At the present time, the ordinary *khālsa* or fiscal revenue of the State may be said to be nearly a lakh of rupees (*Imperial) a year, derived chiefly from customs (Rs. 45,000), land revenue (Rs. 15,000), grazing fees (Rs. 7,000), court-fees and fines (Rs. 6,000) and salt

* 150 local rupees have been assumed to be equal to 100 British; the rate of exchange, however, fluctuates almost daily.

(Rs. 5,000). Similarly the ordinary expenditure may be put at about Rs. 85,000 (*Imperial), the main items being cost of administrative staff, civil and judicial, Rs. 20,000; army and police Rs. 18,000; privy purse and palace, including cost of the Mahārāwal's education, Rs. 12,000; stables, including bullocks, camels and elephants, Rs. 10,000; and allowances to relatives of the chief Rs. 6,000. The debts now amount to about Rs. 2,40,000, the Government of India being practically the sole creditor, and the realisable assets, including cash balance in the treasury, are estimated at Rs. 53,000.

The income derived by *jāgīrdārs* and others from the land which they hold on favoured tenures is believed to be about Imperial Rs. 50,000 in an ordinary year, thus making the total revenues of the State approximately a lakh and a half.

Currency.

The local currency is called Akhai Shāhi after Rāwal Akhai Singh, who is said to have established a mint at his capital in 1756 in defiance of orders from Delhi, but his successor Mulrāj obtained the necessary sanction from Shāh Alam II. Prior to 1756, Muhammad Shāhi coins were the circulating medium. The old Akhai Shāhi rupee weighed 168·75 grains and contained only 4·22 grains of alloy, but the issue gradually deteriorated until the alloy reached as much as twelve per cent. Thākur Kesri Singh, who was minister about forty years ago, tried to restore the purity, but as he at the same time reduced the weight of the coin, his action was distrusted, and he was obliged to abandon the attempt.

The silver coins may be divided into two groups, namely those bearing the name of Muhammad Shāh and those bearing that of Her late Majesty. The latter consisted of the rupee, and eight-anna, four-anna and two-anna bits, and were struck in 1860, though not brought into circulation until 1863. The inscriptions on either side are in Persian, that on the reverse being to the effect that the coin was minted "in the 22nd year of Her fortunate reign"—an obvious mistake for the 24th year; the special mint marks are circles of dots, the *pālam* (a sacred bird), and the *chhātā* or regal umbrella. The rupee weighs about 162½ grains, and only ten years ago was worth more than fifteen Imperial annas, but it now exchanges for between ten and eleven annas; its value fluctuates almost daily and has been as low as nine annas. The depreciation of the Akhai Shāhi rupee is ascribed to imprudent over-coinage in former times, to the closure of the Government mints to the unrestricted coinage of silver, and to a series of bad years. A failure of the crops means an increased demand for the Imperial rupee wherewith to purchase grain in Sind, and this increased demand means a fall in the exchange value of the local currency. The Jaisalmer mint has not been worked since 1899, and the Akhai Shāhi rupees are to be converted on the first favourable opportunity.

The copper coinage is known as Dodiā; it is said to have been first struck in 1660 and there was a further issue about 1836. Each

*150 local rupees have been assumed to be equal to 100 British; the rate of exchange, however, fluctuates almost daily.

coin weighs from eighteen to twenty grains, and forty go to an anna. Gold *mohurs* and smaller pieces have been minted in small numbers since 1860, and are said to be of pure gold. The inscription is the same as on the later silver coins, and the *mohur* weighs 167 grains.

LAND REVENUE. General system.

The land revenue system is primitive, having undergone no changes for a long period, and neither a survey nor a settlement has been made. In a few places the revenue is paid in cash at Rs. 2 (local currency) for as much land as can be cultivated with a pair of bullocks, the tax being called *halota* from *hal* (a plough); but throughout the State payment in kind is most common. Where wheat or gram is grown, the Darbār takes from one-fifth to one-sixth of the produce, and of the rain crops from one-fifth to one-eleventh. There are four different modes of estimating the Darbar's share of the out-turn. In the first *(kankūt)*, the crop is valued when standing; in the second *(kari kūnta)*, when cut but before threshing; in the third *(lātā)*, after the crop has been threshed out; and in the fourth *(kāngar kūnta)*, from the condition of the bare standing stalks. In addition to the portion payable to the State, the cultivator has to settle the demands of certain officials and servants, such as the keeper of the *kothār* or State granary, the chief's water-carrier, and the man told off to watch the crops in the Darbār's interests; these demands collectively amount to about one-half of what is taken by the State. For example, if the out-turn be one hundred maunds and the State's share one-tenth, then ten maunds would go to the Darbār, five to the above officials and eighty-five maunds to the cultivator.

Tenures.

Of the 471 villages in Jaisalmer, 239 are *khālsa*, 109 are held on the *jāgīr* tenure, 99 in *bhūm*, and 24 are *sāsan* or charitable grants.

Khlāsa.

In the *khālsa* area the Darbār retains all its proprietary rights in the land and deals directly with the *ryots* or cultivators; in the rest of the territory it has transferred those rights, temporarily or permanently, to some individual, subject to certain conditions.

Jāgīr.

The *jāgīrdārs* may be divided into three main groups, namely (i) the Rājwīs, or near relatives of the chief, who, besides possessing one or more villages, receive fixed monthly allowances; (ii) the Raolots or more distant relations of the chief; and (iii) the ordinary Thākurs. All have to serve the Mahārāwal when called upon and present him with a horse on certain occasions such as his installation and marriage, and some pay a fee called *neota* on themselves succeeding to their estates. The tenure seems to differ from that ordinarily found in Rājputāna in that, except in the case of the Rao of Bikampur, no annual tribute is paid, and it is not the custom, on the death of a *jāgīrdār*, to issue a fresh title-deed or *pattā* in favour of his eldest son or heir; the majority of the *jāgīrdārs* may be said to hold in perpetuity, though they can of course be dispossessed for contumacy or any grave offence. There are, however, eleven villages which are held under title-deed, and ten as a reward for services rendered; the holders pay nothing, are liable for service, and retain their estates at the pleasure of the Darbār.

A list of the more important *jāgīrdārs* will be found in Table No. IX in Vol. III-B; all except the Thākur of Khuri belong to the Bhāti clan, which is divided into a number of septs known as Barsang, Khiān, Tejmatot, Prithwīrājot, Dwārkadāsot, Udai Singhot, etc. Among the first two of these subdivisions, the eldest son succeeds his father, and his brothers, if he has any, are allowed to cultivate, free of rent, as much land as they can themselves, or they may employ one or two men and cultivate through them; among the remaining septs the law of gavelkind prevails, and copartners in a village are often very numerous, the property of each consisting sometimes of one or two fields.

Bhūm. The *bhūmiās*, or those holding on the *bhūm* tenure, have to render service when called on, receiving remuneration for the same, and pay a small cess yearly as well as an additional sum on certain special occasions; provided these payments are punctually made, they are left undisturbed in their possessions.

Sāsan. Lands are granted on the *sāsan* tenure in charity or from religious motives to Brāhmans, Chārans, Bhāts, etc., and enjoy complete immunity from all State dues; they are to all intents and purposes grants in perpetuity. In former times, these villages were considered as outside the Mahārāwal's jurisdiction, and if a criminal fled to any of them for refuge, he found a sanctuary.

MISCELLANEOUS REVENUE. The miscellaneous revenue is derived from opium, salt and excise, and averages about Rs. 11,000 or Rs. 12,000 yearly.

Opium. The poppy is of course not cultivated in Jaisalmer, and all the opium consumed in the State is imported *viâ* Bārmer (on the Jodhpur-Bīkaner Railway) where, under an arrangement with the Jodhpur Darbār, the import-duty is levied. This duty, formerly Rs. 26 per maund, was raised to Rs. 80 in 1882 and to Rs. 100 (Imperial) in 1893; and of the sum last mentioned the Jodhpur Darbār retains Rs. 5. A good deal of opium used to be imported—for example, the receipts during the six months ending February 1884 exceeded Rs. 20,000—but, with bad times, the demand for the drug has decreased and the receipts are now about Rs. 5,500 yearly. This import-duty is the sole source of revenue in connection with opium as no license-fees are demanded from the wholesale or retail shops.

Salt. The salt consumed in the State is all manufactured at Kānod; the yearly income derived from the sale of the commodity is about Rs. 5,000, and the average annual consumption per head is said to be a little more than two seers.

Excise. The excise revenue is insignificant, consisting of a few hundred rupees paid yearly by a contractor who has the sole right of selling spirits. The people prefer opium, but those who take liquor are quite content with the local variety.

PUBLIC WORKS DEPARTMENT. No regular Public Works department exists, but an overseer is permanently employed and sees to the repairs of roads and buildings, the ordinary expenditure being about Rs. 1,500 a year or less. The only works of any note carried out during the last fifteen years have been several *kharīns* or tanks for storing water; a comfortable house

outside the town-wall, which cost about Rs. 30,000 and is available for guests; the hospital and lunatic asylum (about Rs. 3,200); and the cenotaph of the late Mahārāwal (about Rs. 4,000).

ARMY. The military force maintained by the State numbers about 220 of all ranks, namely, 39 *sowārs*, mostly mounted on camels, 168 foot-soldiers and 13 gunners, and costs about Rs. 10,000 a year. The men are armed with swords and ordinary smooth-bore matchlocks, and are neither trained nor drilled; they are employed as guards and escorts, and often perform police duties. Out of twenty-five pieces of ordnance, seventeen are said to be serviceable.

POLICE. The strength of the police force is about 140 men, half of whom are mounted on camels, and the yearly cost is about Rs. 8,000. The police and the army are hardly distinguishable, as the one frequently assists the other. Adding the two forces together, we get a total of 360 men, or about one policeman for every forty-five square miles of country and for every 204 inhabitants.

JAILS. The State possesses a jail at the capital and small lockups at the headquarters of the various districts; the latter are under the supervision of the *Hākims*, and are intended only for persons who are under trial or who have been sentenced to short terms of imprisonment. Up to about twenty years ago, prisoners at the capital were confined in insanitary cells in the basement of the fort or in such other places as the authorities selected; the present building, although not originally meant for a prison, has been altered and improved from time to time and is now fairly comfortable, well ventilated and well kept. It has accommodation for 88 persons (eighty males and eight females), and the daily average strength since 1894 (when returns were received for the first time) has been about 48. The yearly cost of maintenance varies between Rs. 1,200 and Rs. 2,500 (British) and averages about Rs. 1,500; there are no jail industries of importance. Some further details will be found in Table No. X in Vol. III-B, and in explanation of the high death-rate in 1900, it may be said that it was a year of famine and that eight of the twelve deaths were due to cholera.

EDUCATION. At the last census 2,164 persons or 2·95 per cent. of the people (namely 5·38 per cent. of the males and 0·13 per cent. of the females) were returned as able to read and write. Thus, in regard to the literacy of its population, Jaisalmer stood tenth among the twenty States and chiefships of Rājputāna. Of the three main religions, the Jains are, as usual, first with 21½ per cent. literate, the Hindus follow at a considerable interval with 3½ per cent., and the Musalmāns are last with only 0·27 per cent. The number literate in English was eighteen.

Up to about 1890, the only schools in the State were of the indigenous type, the teachers being mostly Jatis or Jain priests; these institutions have held their own, and are still much appreciated, especially by the trading castes who are generally content with a little knowledge of the vernacular and the native system of arithmetic and accounts for their sons. In 1890 three schools were opened by the Darbār, namely two at the capital (in one of which an attempt was

made to teach some English but was not persevered in) and the third at Bāp; but they were never popular, and the number on the rolls of all three institutions in 1901 was only about seventy. Since then, although there are still but three schools, considerable progress has been made; the teaching of English has been resumed at the capital, and the staff generally is more efficient. The number on the rolls at the end of October 1906 was 180 as compared with 91 on the 31st March 1904 and 183 on the 31st March 1905, and the daily average attendance was 47 in 1903-04, 112 in 1904-05, and 107 during 1905-06. The schools are all for boys, and no fees are charged anywhere. The expenditure on education, now about Rs. 1,100 a year, is met from a small tax on *bājra, jowār* and *ghī* brought into Jaisalmer town.

MEDICAL. Hospitals.

The State maintains a hospital at the capital, and it was opened in April 1892; for three years there was no accommodation for indoor patients but six beds were provided in 1895-96. In Table No. XII in Vol. III-B will be found a full account of the work done; about 4,700 cases (thirty-seven being those of in-patients) are treated yearly, and some 250 operations are performed. The daily average number of in-patients attending is three, and of out-patients sixty-one, while the cost of maintaining the institution is about Rs. 2,300 yearly.

Lunatic asylum.

Formerly insane persons were lodged in the jail, but a comfortable lunatic asylum was built just outside in 1898-99. It is, however, very little used as insanity is rare.

Vaccination.

Vaccination was started for the first time in December 1890, and has been carried on with considerable success ever since (see Table No. XIII in Vol. III-B), though a falling off is noticeable during the last three seasons. The children of the capital and some adjacent villages are now well protected, but it is not easy to reach the semi-nomadic population of the outlying districts. The total number of persons successfully vaccinated was 150 in *1890-91*, 3,124 in *1894-95*, 2,105 in *1900-01* and 818 in *1905-06*, or about 1·4, 27, 18·2, and 11 per 1,000 of the population respectively. The average cost of each successful case has varied between fourteen pies in 1894-95 and ten annas in 1905-06.

Sale of quinine.

The system of selling pice packets of quinine has been in force for some time, but the sales are very small, and in 1905-06 only seven packets of 7-grain doses each were disposed of.

SURVEY.

The State was surveyed by the Great Trigonometrical Survey of India between 1873 and 1880, and is included in what are known as the Jodhpur and the Eastern Sind Meridional Series. The territory was also topographically surveyed by the Survey of India between 1881 and 1883, and the area, as calculated in the Surveyor-General's office by planimeter from the standard sheets, is 16,062 square miles.

CHAPTER VI.

JAISALMER TOWN.

The town of Jaisalmer, the capital of the State of the same name, is situated in 26° 55′ north and 70° 55′ east, about ninety-five miles north of *Bārmer* station on the Jodhpur-Bīkaner Railway, and approximately 1,200 miles north-west of Calcutta and 600 north of Bombay. It was founded in 1156 by Rāwal Jaisal, whence its name —the *meru* or hill-fort made by Jaisal.

The population at each census was 10,965 in *1881*, 10,509 in *1891*, and 7,137 in *1901*; the decrease of thirty-two per cent. since 1891 was due chiefly to a severe outbreak of cholera which, between the 20th June and the 16th July 1900, carried off 2,154 persons. In 1901 Hindus numbered 5,371, or more than seventy-five per cent. of the total; Musalmāns 1,349 or nearly nineteen per cent.; and Jains 232.

The town stands at the southern end of a low range of hills, and is surrounded by a stone wall about three miles in circuit, ten to fifteen feet high, five to seven feet thick, and strengthened by bastions and corner towers. Within this wall, on an isolated hill to the south, is the fort which is about 250 feet above the surrounding country and 500 yards long by 250 wide at its greatest diameter.

The two main entrances to the town, the Amarsāgar gate on the west and the Gharsisar gate on the east, are connected by a metalled and paved road which is the principal thoroughfare; it is fairly wide in most parts, and near the custom-house opens out and is used as a market-place. The other streets are chiefly narrow and dusty alleys—narrowest where some of the finest houses stand, as the well-to-do were able to encroach on them when rebuilding or improving their residences. A large portion of the space within the walls is unoccupied, but the ruins lying about prove that the place must have been far more populous in former times. Water is obtained chiefly from the Gharsisar tank, 300 yards south-east of the gate of the same name and said to have been constructed by Rāwal Gharsi nearly six hundred years ago, and also from wells, the best of which is behind the jail. There are several other tanks, but they rarely hold water after the rains have ceased, and then only in small quantities.

The hill on which the fort stands is entirely covered by buildings and defences, and the base is surrounded by a buttress wall of solid blocks of stone about fifteen feet high, above which the hill projects and supports the ramparts. The bastions are in the form of half towers, surmounted by high turrets and joined by short thick walls; these again support battlements which form a complete chain of defence about thirty feet above the hill. The view from the ramparts is not attractive; the foreground presents a succession of sterile, rock-bound ridges, barely clad with stunted bushes, while, on the horizon, low undulations mark

the commencement of the Indian desert. The fort is approached from the town by four gates, called respectively the Akhai Pol, Ganesh Pol, Būta Pol and Hawā Pol. The Mahārāwal's palace, the top of which is 957 feet above the sea, surmounts the main entrance, and is an imposing pile crowned by a huge umbrella of metal mounted on a stone shaft, a solid emblem of dignity of which the Bhāti chiefs are justly proud; but the interior is ill-arranged and space is frittered away in numberless small apartments. The water-supply is derived from five wells, varying in depth from 236 to 300 feet; the best well, known as Jaisalu, never fails and the water is excellent. Within the fort are four Vaishnava and eight Jain temples. Of the former, one is said to have been built in the twelfth century by Rāwal Jaisal and is called Ad-Nārāyan's or Tīkamjī's temple, while another, ascribed to Rāwal Lākhan, is remarkable as possessing gold and silver plated shutters. The Jain temples, especially that dedicated to Pārasnāth, are very fine, the carving in them being exquisite; tradition says that one or two of them are 1,400 years old, but this is extremely improbable as the town and fort were only founded 750 years ago, and it is believed that the oldest, that to Pārasnāth, was built about 1332 by one Jai Singh Cholasāh.

The citadel, town-wall and all the principal houses, being built of the yellow limestone of which the hill itself is composed, have at a distance a sombre appearance from the want of a variety of colours to relieve the eye; and, indeed, it is hard to say at the first view which is the native rock and which are the artificial buildings, for the former is flat-topped and the latter are flat-roofed. But on closer inspection, it will be seen that an immense deal of labour has been expended on the architectural decorations of most of the houses, the fronts of which are ornamented with richly carved balconies and lattices. One of the finest buildings is the house of the notorious *Dīwān*, Sālim Singh, who devastated the country about a hundred years ago with his extortions and cruelty; it is six storeys in height, and contains much ornamentation, especially on the top storey.

The town possesses a post office, a jail which has accommodation for eighty-eight prisoners, a small lunatic asylum, a couple of schools in one of which English is taught, and a hospital with beds for six in-patients.

Bibliography.

A. Dow.—*History of Hindustān*, London, 1792.

J. Tod.—*Annals and antiquities of Rājasthān*, Vol. II, London, 1832.

J. Sutherland.—*Sketches of the relations subsisting between the British Government and the different Native States*, Calcutta, 1837.

R. H. Irvine.—*Some account of the general and medical topography of Ajmer*, Calcutta, undated but published about 1840.

M. Elphinstone.—*History of India*, Vol. II, London, 1841.

E. Thornton.—*Gazetteer of the East Indian territories*, London, 1857.

J. Prinsep.—*Essays on Indian antiquities*, London, 1858.

Rājputāna Agency administration reports, annually from 1865-66.

H. M. Elliot.—*History of India*, Vols. I and V, London, 1867 and 1873.

Reports on sanitation, dispensaries, jails and vaccination in Rājputāna, annually from 1872-73.

H. Blochmann.—*Ain-i-Akbarī*, Vol. I, Calcutta, 1873.

A. Cunningham.—*Archæological Survey of Northern India* Vol. II, Calcutta, 1874.

G. B. Malleson.—*The Native States of India*, London, 1875.

C. K. M. Walter.—*Gazetteer of Jeysulmere*, Calcutta, 1877.

Rājputāna Gazetteer, Vol. II, Calcutta, 1879.

Rājputāna Census Reports, 1881, 1891 and 1901.

Great Trigonometrical Survey of India, Vol. VII.A, Dehra Dūn, 1887.

Report on the relief operations undertaken in the Native States of Mārwār, Jaisalmer, etc., in 1891-92, Bombay, 1892.

C. U. Aitchison.—*Collection of treaties, engagements and sanads*, Vol. III, Calcutta, 1892 (under revision).

R. D. Oldham.—*Manual of the geology of India*, Calcutta, 1893.

W. W. Webb.—*Currencies of the Hindu States of Rājputāna*, Westminster, 1893.

Report on the relief operations in the Western Rājputāna States during 1896-97, Jodhpur, 1897.

A. Adams.—*The Western Rājputāna States*, London, 1899.

C. M. Duff.—*Chronology of India*, Westminster, 1899.

Report on the famine in Rājputāna in 1899-1900, Ajmer, 1901.

F. Ashton.—*The salt industry of Rājputāna*, see *The Journal of Indian art and industry*, Vol. IX, January 1901.

Jaisalmer State administration reports, annually from 1901.

Chiefs and leading families in Rājputāna, Calcutta, 1903.

PART II.

Jodhpur State or Marwar.



Photo.-Mechl. and Litho. Dept., Thomason College, Roorkee.

JODHPUR STATE.

CHAPTER I.

PHYSICAL ASPECTS.

Jodhpur is by far the largest State in Rājputāna, having an area of 34,963 square miles or more than one-fourth of that of the entire Province. It lies between the parallels of 24° 37′ and 27° 42′ north latitude, and 70° 5′ and 75° 22′ east longitude. Its greatest length from north-east to south-west is about 320 miles, and its greatest breadth 170 miles. Area, position etc.

It is bounded on the north by Bīkaner; on the north-west by Jaisalmer; on the west by the Thar and Pārkar District of Sind; on the south-west by the Rann of Cutch; on the south by Pālanpur and Sirohi; on the south-east by Udaipur; on the east by Ajmer-Merwāra and Kishangarh; and on the north-east by Jaipur. Boundaries.

The State is sometimes called Jodhpur after its capital, which was founded by and named after Rao Jodha in 1459, and sometimes Mārwār. The latter word is a corruption of *Maru-wār*, classically *Marusthala* or *Marusthān*, meaning the region of death, and hence applied to a desert; another form of it was *Marudesa*, whence the unintelligible *Mardes* of the early Muhammadan writers. In former times, Mārwār included about half of Rājputāna, and Abul Fazl thus described it in 1582:— Meaning of name.

"Mārwār is in length one hundred, and in breadth sixty *kos.* The *sarkārs* of Ajmer, Jodhpur, Sirohi, Nāgaur and Bīkaner are dependent on it. The Rāthor tribe have inhabited this division for ages past. Here are many forts of which the following are the most famous, namely Ajmer, Jodhpur, Bīkaner, Jaisalmer, Umarkot and Jainagar." In Tod's *Annals and Antiquities of Rājasthān* it is said that "its ancient and appropriate application comprehended the entire desert from the Sutlej to the ocean."

The country, as the name Mārwār implies, is sterile, sandy and inhospitable, but improves gradually from a mere desert in the far west and north to comparatively fertile and habitable lands in the north-east, east, and south-east in the neighbourhood of the Arāvalli hills. The "great desert," forming the whole of the Jodhpur-Sind frontier, extends from the edge of the Rann of Cutch beyond the Lūni river northward, and between it and what has been called the "little desert" on the east is a zone of less absolutely barren country, consisting of rocky land cut up by limestone ridges, which to some degree protect it from the desert sands. The general aspect is that of a dreary waste covered with sand-hills, shaped generally in Configuration.

long straight ridges, which seldom meet but run in parallel lines, separated by short and fairly regular intervals, resembling the ripple marks on a sea-shore upon a magnified scale. Some of these ridges may be two miles long, and vary from 50 to 400 feet in height; their sides are scoured by water, and at a distance they look like substantial low hills. Their summits are blown into wave-like curves by the action of the periodical westerly winds; they are sparsely clothed with stunted shrubs and tufts of coarse grass in the dry season, and the light rains cover them with vegetation. The desolation becomes more absolute and marked as one proceeds westwards, and of the northern and north-western portion, known as the *thal*, it has been said that there are "more spears than spear-grass heads," and "blades of steel grow better than blades of corn." Villages are few and far between, cultivation is everywhere poor and precarious, and water is exceedingly scarce, often 200 to 300 feet below the surface and generally brackish. A well measured by an officer of the Great Trigonometrical Survey of India at the village of Bhākri (in the Phalodi district) in 1874 was found to be 450 feet in depth and 5 feet 4 inches in diameter.

Hill system.

Scattered over the State are numerous isolated hills varying in height from 1,000 to 2,000 feet above the sea, and several small ranges, offshoots of the Arāvallis, are to be found in the south, notably the Sūnda hills (Jaswantpura) where a height of 3,252 feet is attained, the Chappan-kā-pahār near Siwāna (3,199 feet), and the Rojā hills at Jālor (2,408 feet).

The Arāvallis.

The Arāvalli hills, already described to some extent in Volumes I-A and II-A of this series, mark the entire eastern boundary from near the Sāmbhar lake in the north-east to the Sirohi and Udaipur borders in the south-east. The highest peak within Jodhpur limits is 3,607 feet above sea-level, and is situated about thirteen miles east of Nāná station on the Rājputāna-Mālwā Railway. These hills, which have been identified as the *apocopi montes, deorum poena appellati* of Ptolemy and the *Paripatra* of the *Vishnu Purāna*, are fairly well wooded, especially on the Jodhpur or western side where the slope is more abrupt and the rainfall is usually heavier than on the east. The principal passes leading down into Mārwār are those at Barr and Dewair in Merwāra, and the Paglia Nāl above Desuri a little further to the south-west; the first of these is metalled throughout and forms part of the Agra-Ahmadābād road. *Bale buthi tale tuthi*, meaning "the rainfall of the Arāvallis benefits the plains below" is a not uncommon saying in Mārwār, and indeed these hills form one of the watersheds of India, and supply some of the most distant sources of the Gangetic drainage, while the rain which falls on the western slopes finds its way by the Lūni into the Rann of Cutch.

River system.

Rivers play a very subordinate part in moulding the surface features of the country. The only important river is the Lūni; it has several tributaries, the chief being the Lilri, the Raipur Lūni, the Guhiya, the Bāndi, the Sukri and the Jawai on the left bank, and the Jojri on the right, but none of them is perennial.

The Lūni or salt river, the *Lonavāri* or *Lavanavāri* of Sanskrit writers, rises in the hills south-west of Ajmer city in 26° 25′ N. and 74° 34′ E., and is first known as the Sāgarmati. After passing Govindgarh in the Ajmer District, it is joined by the Sārsuti (Saraswatī) which has its source in the sacred lake of Pushkar, and from this point it is called the Lūni; it at once enters Jodhpur territory and, after a course of about 200 miles generally west by south-west, is finally lost in the marshy ground at the head of the Rann of Cutch (24° 40′ N. and 71° 15′ E.). It receives the drainage brought by the mountain torrents down the western slopes of the Arāvalli hills between Ajmer and Abu, and is a veritable blessing to the southern districts of Jodhpur. It is for the most part merely a rainy weather river, and in the hot months melons and the *singhāra* nut *(Trapa bispinosa)* are grown in considerable quantities in its dry bed. The banks range from five to twenty feet in height, and are in parts covered with bushes of *jhao (Tamarix dioica)*. In heavy floods, which, however, are rare, the river overflows its banks in the districts of Mallāni and Sānchor; the local name of the overflow is *rel,* and on the soil thus saturated fine crops of wheat and barley are grown. The Lūni is, however, most capricious and erratic; on one bank it may be a blessing, on the other a curse. As far as Bālotra the water is generally sweet, but lower down it becomes more and more saline in character till, on the edge of the Rann of Cutch, the three branches of the river are described as reservoirs of concentrated brine. Drinking water is obtained from November to June from wells sunk on the banks to a few feet below the level of the bed, and from these wells considerable tracts are irrigated. This has given rise to the local proverb that half the produce of the country, so far as cereals are concerned, is the gift of the Lūni. Lūni.

By means of a dam thrown across the river near the town of Bilāra, one of the largest artificial lakes in India has been formed. It is called Jaswant Sāgar after the late chief of Jodhpur, and can, when full, irrigate more than 20,000 acres. Its catchment area is 1,300 square miles; surface area (when full) eleven square miles; capacity 3,800 million cubic feet; greatest depth forty feet; and length of canals and distributaries forty miles. The total expenditure to the end of September 1906 was rather more than nine lakhs; the yearly revenue since the work was completed in 1895-96 has averaged about Rs. 24,000, and the annual cost of maintenance, apart from capital expenditure, Rs. 2,500.

The first important tributary of the Lūni appears to be the Līlri; it rises in the Arāvallis west of Beāwar, and flows north by north-west till it reaches the small town of Rās, when the hills turn it to the south-west, but, after receiving the Sukri on its left bank, it resumes its north-westerly course and, passing Nīmāj, falls into the Lūni near the village of Nīmbol. Līlri.

The Raipur Lūni has its source in the Merwāra hills and flows north by north-west to the village of Raipur, after which it is named; Raipur Lūni.

here it is crossed by the Rājputāna-Mālwā Railway, and it then continues north-west past Bilāra.

Jojri. The Jojri is the only stream of any size that joins the Lūni from the north. It rises in the Merta district and flows south-west for about fifty miles past the town of Pīpār.

Guhiya. The Guhiya or Guhiya Bāla has its source in the low range of hills south of Bilāra and, after flowing south-west for nearly twenty miles, is joined by the Sukri or Sukli. A little lower down at Dholera it has been dammed to form a reservoir called Sardār Samand after the present Mahārājā; it continues in a generally westerly direction and, after receiving the Phumphāria and Bāndi on its left bank and the Reria on its right, it unites with the Lūni at Dūnāra. Near Rohat station it is crossed by the Jodhpur-Bīkaner Railway, and in former times used to interfere considerably with the traffic, occasionally detaining the trains for a whole day. The Sardār Samand mentioned above is formed by three earthen dams which have a total length of 27,252 feet and a maximum height of 31½ feet. The tank is capable of irrigating about 18,000 acres, but the area irrigated yearly since its completion in 1902 has, owing to deficient rainfall, averaged only about 3,000 acres. The catchment area is 800 square miles; surface area (when full) thirteen square miles; capacity 3,500 million cubic feet; greatest depth 25½ feet; and length of canals and distributaries thirty miles. The total outlay on this work to the end of September 1906, including four lakhs spent during the famine, was nearly eight lakhs, while the yearly revenue and cost of maintenance have averaged Rs. 12,000 and Rs. 1,700 respectively.

Bāndi. The Bāndi, already mentioned as an affluent of the Guhiya, rises to the south of Sojat and flows west past the important town of Pāli, where its waters are used for dyeing purposes; it has a total length of about fifty miles. A large irrigation tank is now under construction three miles south of Pāli, and is expected to cost about three lakhs; its estimated capacity is 1,360 million cubic feet, and the maximum depth will be twenty-three feet.

Sukri. The Sukri, a very common name for a river in these parts, comes from the Arāvalli hills south of Desuri, and flows north-west past that town and Chānod, eventually joining the Lūni just above Samdari. It is crossed by the Rājputāna-Mālwā Railway at Rāni, and near the village of Bānkli it is dammed so as to form a reservoir called the Edward Samand after His Majesty. The catchment area is 450 square miles; surface area (when full) six square miles; capacity 970 million cubic feet; greatest depth twenty-two feet; and the present length of canals and distributaries is 5½ miles. The work was completed in 1906 at a cost of about 3¾ lakhs, including rather more than two lakhs of famine expenditure; it is capable of irrigating 6,000 acres, and is expected to bring in a yearly revenue of approximately Rs. 5,000.

Jawai. The last but not the least important tributary of the Lūni is the Jawai. Rising in the south-eastern corner of the State, it first flows north close to Nāna and Bera, and next north-west along the Jodh-

pur-Sirohi border past Erinpura cantonment; after leaving Ahor on its right and Jālor on its left, it bends to the west and eventually finds its way into the Lūni a little above Gūrha. It receives many feeders, including two bearing the name of Sukri, and, when in flood, is of considerable breadth, particularly at Erinpura where it is sometimes impassable. It is proposed to dam this river near Erinpura Road station and form a reservoir capable of storing some 6,000 million cubic feet of water.

The natural lakes are all saline, the principal being at Sāmbhar, Dīdwāna and Pachbhadra; they are described in Chapter XXII below. Small depressions of the same kind exist at Kuchāwan, Phalodi, Pokaran and other places. There are also a few *jhīls* or marshes, notably one near Bhatkī in the Sānchor district in the south-west, which covers an area of forty or fifty square miles in the rainy season, and the bed of which, when dry, yields good crops of wheat and gram. Of artificial tanks, three of the largest have been mentioned, namely the Jaswant Sāgar, the Sardār Samand, and the Edward Samand; other useful ones are Bālsamand, Kailāna and Chopāsni near the capital, and those at Chopra and Khārda. Lakes.

The oldest rocks found in the State are schists belonging to the Arāvalli system; calcareous bands are of common occurrence among them, and, where these are in contact with veins of intrusive granite, they have been altered into a pure white crystalline marble which has been extensively quarried at Makrāna and in smaller quantities at Sārangwa. Geology.

Resting unconformably upon the schists is a great series of ancient subaërial rhyolites with subordinate bands of conglomerate, named after the Mallāni district in which they were first discovered; they cover a large area in the west, and extend to the capital. The subaërial character of the lavas is proved by the inclusion between the flows of bands of rolled pebbles of the lavas themselves and other crystalline rocks derived from the Arāvalli range. The rhyolites are pierced by dykes and bosses of granite of two varieties, one containing hornblende but no mica (Siwāna granite) and the other both hornblende and mica (Jālor granite). Both these granites form considerable mountain masses, the former the Saora range south of Siwāna rising to over 3,000 feet above sea-level, and the latter the Rojā hills west of Jālor. The rhyolites are also traversed by numerous dykes of basic igneous rock, having the composition of olivine, dolerite or diabase. An intrusive rock of a very different kind occurs to the east of Bārmer, and contains œgirine, augite, sanidine and sodalite.

Near Jodhpur sandstones of the upper division of the Vindhyan system are found resting upon the Mallāni lava-flows, generally with a conglomerate at the base; the sandstones are largely used for building purposes. Some curious markings have been found at certain horizons in these stones near the village of Osiān, thirty miles north of Jodhpur, which may be of organic origin, but no indubitable fossils have ever been discovered in them.

Among rocks newer than the Vindhyans are the boulder beds of conglomerate, showing traces of glacial origin, at Pokaran, which have been referred to the Tālcher period, though they may be older. Sandstones and conglomerates with traces of fossil leaves occur at Bārmer and are probably of jurassic age. The more recent deposits consist of calcareous conglomerates, which are found in the larger river basins and denote a period when the flow of water was much greater than at present; blown sand or dunes; and calcareous tufa or *kankar*. The sand-dunes are all of the transverse type, that is, they have their longer axes at right angles to the direction of the prevailing south-west wind. The sand contains large quantities of the calcareous casts of foraminifera, and it is by the solution of these that the beds of *kankar* are formed. The sand also contains salt, which is leached out by occasional rains and collects in depressions as at Pachbhadra and the Sāmbhar lake.

Botany.

The eastern and some of the southern districts in the direction of the Arāvalli range are well wooded with natural forest, and many of the ravines leading down into the plains from the hills produce timber of fair scantling. The rest of the country possesses nothing worthy of the name of forest, though belts of *khejrā (Prosopis spicigera)* and *rohīra (Tecoma undulata)* are common, and cultivated topes of *nīm (Azadirachta indica)* are found in many villages in the less fertile parts. They grow fairly rapidly without any other assistance than protection from camels and goats. In the more favoured tracts, the most important indigenous timber tree is the *babūl (Acacia arabica)*, the leaves and pods of which are used as fodder in the hot weather, while the bark is a valuable tanning and dyeing agent, and the gum is exported in considerable quantities. Among other trees may be mentioned the *mahuā (Bassia latifolia)*, esteemed for its timber and the flowers from which country liquor is distilled; the *dhāk* or *palās (Butea frondosa)*; the *dhao (Anogeissus pendula)*, the wood of which is largely used for agricultural implements; the *gūlar (Ficus glomerata)*, a common species of wild fig and attractive to bears; the *jāmun (Eugenia jambolana)*, affording excellent shade; the *karāyia (Sterculia urens)*, a fine tree when its large palmate leaves come out after the rains; the *sālar (Boswellia thurifera)*, which produces a scented gum and is valuable for its timber; the *semal* or cotton-tree *(Bombax malabaricum)*; the *siris (Albizzia Lebbek)*, the heart-wood of which is hard and black, and is used for ornamental carving; and the *tīmru (Diospyros tomentosa)*, which produces ebony. The *pīpal (Ficus religiosa)*, a sacred tree, is found in almost every village, and the *bar (F. bengalensis)* and tamarind are fairly common throughout the plains.

The principal fruit trees are the *anār* or pomegranate *(Punica granatum)*, the Jodhpur variety of which is celebrated for its delicate flavour, and the *nīmbū* or lime tree; while the most important shrub is *anwal (Cassia auriculata)*, which covers extensive tracts in Godwār in the south-east and gives shelter to small game, its bark being largely used in tanning.

Turning now to the desert, the chief trees are two species of the *ber (Zizyphus jujuba* and *nummularia)*, which flourish even in years of scanty rainfall, and furnish the main fodder and fruit supply of this part of the country. The *khejrā* is not less important, as its leaves and shoots provide the inhabitants with vegetables (besides being eaten by camels, goats and cattle), its pods are consumed as fruits, its wood is used for roofs, carts and agricultural implements or as fuel, and its fresh bark is, in years of famine, stripped off and ground with grain to give the meagre meal a more substantial bulk. The *āk* or *ākrā (Calotropis procera)* is the flowering shrub of the desert; it is in bloom for many months of the year, and its leaves are always green in the hottest weather; the cotton-like substance which surrounds its seeds is used for stuffing pillows and quilts, its wood for roofs and cattle enclosures or as fuel, and the acrid juice of its green shoots as a medicine. Another useful shrub is the *kair (Capparis aphylla)*, which provides a valuable fodder for camels and goats, and a durable timber to the peasant; its crimson flowers light up the sandy waste in March and April, and its fruit is eaten. Among other shrubs may be mentioned *phog (Calligonum polygonoides)*, on which camels have to subsist for the greater part of the year, and two cactaceous looking spurges called *thor (Euphorbia Royleana* and *neriifolia)* which form efficient hedge-rows.

Of grasses the following are common in the fertile tract and are more or less good as fodder:—*baru (Sorghum halepense)*; *chhenkī (Paspalum kora)*; *karar (Iseilema laxum)*; *dhāman (Pennisetum cenchroides)*; *jūnjlī (Andropogon foveslatus*; and *sūrwāla (Heteropogon contortus)*, which can, it is said, be stacked for a dozen years without fear of deterioration. *Dāb* or *kusha (Eragrostis cynosuroides*) is mostly used in the performance of religious rites and is fit to serve as fodder only when other grass is scarce; *seran (Ischæmum laxum*) is one of the best fodder grasses, and can be used for ropes, cots and matting in the same way as *lāmp (Aristida depressa)* or *mūnj (Saccharum ciliare)*, another hard grass. *Khas (Andropogon muricatus)*, the roots of which are used for making *tattīs*, fans and scent, and *dūbh* or *dob (Cynodon dactylon)*, a very fine grass which will keep for years, are of rare occurrence.

The desert grasses consist of *dhāman*, which has already been mentioned and is considered the best; *bharūt (Cenchrus catharticus)*, particularly abundant in years of scarcity when the poorer people subsist on it; the seed of this grass is about the size of a pin's head and is enclosed in a prickly husk which causes a great deal of discomfort to both man and beast, as it sticks in the clothes of the former and the hair of the latter, and is very difficult to remove. Other grasses found in the western half of the State are *murant (Chloris Roxburghiana)*; *makrā (Eleusine Ægyptiaca)*; *mothea (Mothea tuberosa)*; *tāntiā (Eleusine flagellifera)*; *sīwan (Panicum frumentaceum)*; and *bīkaria*, which is the poorest of them all.

On the higher slopes of the Arāvallis are some trees and plants which could not exist in the dry hot plains, such as an orchid, *am-*

bārtari (Aerides affine); a stinging nettle, *agia (Girardinia heterophylla)*; the *charr (Pongamia glabra)*; a wild rose; the *karanda (Carissa carandas)*, etc., besides a few ferns and mosses.

Fauna. The fauna is rather varied. Lions are now extinct, the last four having been shot near Jaswantpura about 1872, and the wild ass *(Equus onager)* is seldom, if ever, seen; but tigers, black bears and *sāmbar (Cervus unicolor)* are still to be found in the Arāvallis and the Jaswantpura and Jālor hills, though in yearly decreasing numbers. Wild pig are fairly numerous in the same localities, but are scarcer than they used to be in the low hills adjacent to the capital. Wolves are common in the west, where they hunt in packs and are much dreaded by the people, and wild dogs are occasionally met with in the forests. Panthers and hyænas are generally plentiful in the neighbourhood of hills and ravines, while *nīlgai (Boselaphus tragocamelus)* are found in several of the northern and eastern districts. Ravine deer abound in the plains, as also do black buck, save in the actual desert, but the *chītal (Cervus axis)* is only seen on the slopes of the Arāvallis in the south-east. In addition to the usual small game, such as hare and several varieties of partridge and quail, jungle-fowl and spur-fowl are to be found on the Arāvallis and some of the higher hills, and there are four species of sandgrouse (including the imperial) and two of bustard, namely the great Indian *(Eupodotis Edwardsi)* and the *houbāra (Otis Macqueeni.)* Both kinds of florican *(Sypheotides aurita* and *bengalensis)* are seen in the grass-lands during the rains, but disappear immediately after. Throughout the cold weather, in seasons of ample rainfall, when the tanks and marshes become well replenished, duck and teal are found in abundance, and geese, snipe, bittern, rails, plovers, and godwits are common.

Of fish there is no great variety, but the following are obtainable from some of the rivers and tanks:—*lānchi* or fresh water shark *(Bagarius yarrelii)*; *sānwal* or murral *(Ophiocephalus marulius)*; *gīri (Barilius modestus)*; *derai (B. barila)*; *rohū (Labeo rohita)*; *chilwā*; and *natāra*, a species of mullet *(Mugil corsula)*.

Climate and temperature. The climate is dry, even in the monsoon period, and characterised by extreme variations of temperature during the cold season (15th November to about 15th March), when the mean daily range is sometimes as much as 30° and malarial and other fevers prevail. The hot months are fairly healthy, but the heat is intense and trying; scorching winds prevail with great violence in April, May and June, and sand-storms are of frequent occurrence. The climate is often pleasant towards the end of July and in August and September, but a second hot weather is not uncommon in October and the first half of November.

An observatory was opened at Jodhpur city on the 10th October 1896, and the average daily mean temperature for the nine years ending 1905 has been 80·9° (varying from 62·7° in January to 94·2° in May). The mean daily range is about 25° (16·6° in August and 30·5° in November); the mean maximum 93·4° (76° in January and

107·3° in May); and the mean minimum 68·3° (49·4° in January and 82·2° in June). The highest temperature recorded since the observatory was established has been 120·9° on the 10th June 1897, and the lowest 27·9° on the 29th January 1905.

Observatories are maintained by the Government of India at Pachbhadra and Sāmbhar, and statistics are available for twenty-seven and twenty-six years respectively. The average daily mean temperature at the former place is 80° and the mean daily range 29·9°; the similar figures for Sāmbhar are 76·9° and 24·8°. The highest and lowest temperatures recorded at these observatories during recent years have been :—Pachbhadra, 123·6° on the 25th May 1886 and 24·2° on the 31st January 1905; Sāmbhar, 117° in 1897 (date not known) and 25° on the 31st January and 1st February 1905. Some further details regarding temperature will be found in Tables Nos. XIV and XV in Volume III-B.

Rainfall.

The country is situated outside the regular course of both the south-west and north-east monsoons, and the rainfall is consequently scanty and irregular. Moreover, even in ordinary years, it varies considerably in different districts and is so erratic and fitful that it is a common saying among the village folk that "sometimes only one horn of the cow lies within the rainy zone and the other without." The rains in their advent into Mārwār first come into contact with the hilly districts in the south-east and south, where the woods attract and absorb a large share of the moisture, but as they advance towards the west and north, they often lose themselves in the dry and hot air of the desert. The State receives but a very small share of the winter rains of northern India, and as substitutes for summer showers has only dust-storms to offer. There is thus practically one rainy season, and it is of very short duration; if the fall be deficient in amount or badly distributed, there is no hope of a change for better times until the next year's rains come round.

The average annual fall at Jodhpur city during the twenty-six years ending 1905 has been $12\frac{3}{4}$ inches, of which 4·43 inches are usually received in August, 3·78 in July, 1·90 in September, and 1·30 in the closing days of June. The actual fall has varied from $29\frac{3}{4}$ inches in 1893 to less than one inch in 1899, and it may be of interest to mention that in August 1881 ten inches fell in a single day. Statistics for the districts are available for periods ranging from eight to twenty-five years and show the average annual rainfall to be less than seven inches at Sānkra and Sheo in the west, more than eighteen at Bāli in the south-east and Jaswantpura in the south, and nearly twenty at Sāmbhar in the north-east. As in the case of the capital, 1893 was the year of heaviest rainfall, more than $55\frac{1}{2}$ inches having been received at Sānchor in the south, while in 1899 only fourteen cents were registered at Sheo and Sānkra. Some further particulars regarding the rainfall will be found in Tables Nos. XVI and XVII in Volume III-B.

CHAPTER II.

History.

Genealogy.

The Mahārājā of Jodhpur is the head of the Rāthor clan of Rājputs, and claims descent from Rāma, the deified king of Ajodhyā. The Rāthors thus belong to the Sūrajbansi or Solar race of Rājputs, tracing back to Ikshwāku, son of the Manu Vaivaswat, who was the son of Vaivaswat, the sun.

Early history.

The old name of the clan was Rāshtra or Rāshtrik (meaning country or ruler), and to the first of these words eulogistic suffixes and prefixes were subsequently attached, such as Rāshtra-kūta (*kūta* = highest) and Mahā-rāshtra (*mahā* = great). The Rāshtras are mentioned in some of Asoka's edicts as rulers of the Deccan, but their earliest known king is Abhimanyu of the fifth or sixth century A. D., from whose time their history is increasingly clear. For nearly four centuries preceding 973 the Rāshtrakūtas gave nineteen kings to the Deccan, the western portion of which was called Mahārāshtra after them. In the middle of the eighth century Dantidurgā, the sixth of this line, overthrew Kīrtivarman II, Chālukya, and effected other conquests but, becoming unpopular, was deposed by his uncle, Krishna I, whose reign is memorable for the execution of "the most marvellous architectural freak in India," the Kailāsa temple at Ellora in Hyderābād. The third in succession to Krishna I was Govinda III who ruled towards the end of the eighth and in the beginning of the ninth century; he conquered the province of Lāta (central and southern Gujarāt), which he made over to his brother, and subsequently Mālwā, while, later on, he marched to the Tungabhadra and subdued the Pallava king of Kānchī (Conjeeveram). He was followed by Amoghavarsha I who occupied the throne for at least sixty-two years and fixed his capital at Mānyakheta, generally identified with Mālkhed in the Nizām's dominions; he patronised the Digambara, or naked, sect of the Jains and was apparently himself a follower of that creed. In his time, there was constant fighting with the Eastern Chālukya Rājās of Vengī, a tract between the Kistna and Godāvari rivers. The war with the Cholas in the reign of Krishna III (940-59) was remarkable for the death of the Chola king on the field of battle in or about 948. The last of the Rāshtrakūta rulers of the Deccan was Kakka II, who was overthrown in 973 by Taila or Tailapa, a scion of the old Chālukya stock, who restored the family of his ancestors to its former glory and founded the dynasty known as that of the Chālukyas of Kalyāna.

Migration to Kanauj.

Driven from the Deccan, the Rāshtrakūtas sought shelter in Kanauj where a branch of their family is said to have formed a settlement early in the ninth century. Here, after living in comparative obscurity for about twenty-five years, they made room for themselves

by dispossessing their protecting kinsmen and founded a new dynasty known by the name of Gahadawāla or Gaharwār. There were seven kings of this line, namely Yasovigraha, Mahīchandra, Chandradeva, Madanapāla, Govindachandra, Vijayachandra and Jayachandra, but the first two are said to have never actually ruled over Kanauj. About 1170, there were two rival Hindu monarchies, each of which claimed the first place in northern India. A Chauhān Rājput, Prithwī Rāj, ruled over Delhi and Ajmer, while Jayachandra or Jai Chand was the Rāthor king of Kanauj; the latter decided to celebrate a feast in the spirit of the ancient horse-sacrifice (*Rājasūya* or *aswamedha*) in order to proclaim himself the overlord. At such a feast, all menial offices had to be filled by royal vassals, and the Delhi monarch was summoned as a gate-keeper, along with the other princes of Hindustān. During the ceremony, the daughter of Jai Chand was nominally to make her *swayamvara* or choice of a husband, a pageant survival of the reality in the Sanskrit epics. The Delhi Rājā loved the maiden but could not brook to stand at another man's gate, and, as he did not arrive, a mock image of him was set up at the door. When the princess entered to make her choice, she looked calmly round the circle of kings and then, stepping proudly past them to the door, threw her bridal garland over the neck of the ill-shapen image. Forthwith, says the story, Prithwī Rāj rushed in, sprang with the princess on his horse, and galloped off towards his northern capital. The outcome was a series of destructive combats between the two chiefs, in which the Chauhān's position became untenable by reason of Muhammad Ghorī's invasion of his territory, and Jai Chand had the inglorious satisfaction of looking on with unconcern while Prithwī Rāj was being overwhelmed by the alien foe. Weakened by strife, the Chauhān of Delhi fell, his death exposing the north-western frontier, and the ruin of Kanauj was only a question of time and of choice; and this question was settled in 1194 when Jai Chand's turn came to suffer defeat in the desperately fought battle of Etāwah and death* by drowning in the Ganges, while attempting to escape. Thus ended the Rāthor dynasty of Kanauj.

The Gaharwār dynasty.

The nearer kinsmen of Jai Chand, unwilling to submit to the conqueror, sought in the scrub and desert of Rājputāna a second line of defence against the advancing wave of Muhammadan conquest. Siāhjī, the grandson or, according to some, the nephew of Jai Chand, with about two hundred followers, "the wreck of his vassalage," accomplished the pilgrimage to Dwārka, and is next found conquering Kher (in the Mallāni district) and the neighbouring tract from the Gohel Rājputs, and planting the standard of the Rāthors amidst the sand-hills of the Lūni in 1212. About the same time, a community of Brāhmans held the city and extensive lands of Pāli in grant

Migration to Rājputāna.

* Some say that he was slain by an arrow from the bow of Kutb-ud-dīn, the favourite general of Muhammad Ghorī. It is historical that his body was found and recognised by his false teeth, "a circumstance" says Elphinstone in the solitary instance of humour in his solemn history, "which throws grave light on the state of manners."

from the Parihār Rājputs of Mandor and, being greatly harassed by Mers, Bhīls and Mīnās, invoked the aid of Siāhjī in dispering them. This he readily accomplished and, when subsequently invited to settle in the place as its protector, celebrated the next Holī festival by putting to death the leading men and in this way adding the district to his conquests. The foundation of the State now called Jodhpur thus dates from about 1212, but this was not the first appearance of the Rāthors in Mārwār for, as the inscription at Bijāpur in the south-east tells us, five of this clan ruled at Hathūndi (Hastikūndi) in the tenth century, and they are supposed to have been an offshoot of the Rāshtrakūtas of the Deccan. In Siāhjī's time, however, the greater part of the country was held by Parihār, Gohel, Chauhān, or Paramāra (Ponwār) Rājputs.

A list of the chiefs of Mārwār from 1212 to the present time will be found in Table No. XVIII in Volume III-B. Siāhjī, having murdered the leading Brāhmans of Pāli, outlived his treachery by only twelve months and left three sons. The eldest, Asthān, succeeded him, conquered Idar from the Bhīls and gave it to his brother Soning, while his other brother, Ajai Mal, is said to have defeated a Chaura chieftain named Bīkam Singh and established himself in some part of Saurāshtra (Kāthiāwār). Of the next eight chiefs there is little to be said save that they unsuccessfully attempted to wrest Mandor from the Parihār Rājputs, but Salkha is deserving of mention as the father of Mallināth after whom the district of Mallāni takes its name.

Rao Chonda makes Mandor his capital, 1381.

In 1381 Rao Chonda accomplished what his predecessors had been unable to do; he took Mandor from the Parihār chief and made his possession secure by marrying the latter's daughter. This place was the Rāthor capital for about eighty years, and formed a convenient base for adventures further afield which resulted in the annexation of Nāgaur and other places before Chonda's death in 1408 or 1409. He had fourteen sons, the eldest of whom was Ran Mal, and one of his daughters was married to Rānā Lākhā of Mewār and was the mother of Rānā Mokal.

According to some authorities, Ran Mal succeeded his father, but others assert that a younger brother, Kanha, forcibly seized the *gaddi* and held it for five years when he was killed fighting against the Sānkla Rājputs, and that he was followed by his son Satta who, after ruling for four years, made way for his uncle Ran Mal. To the latter is attributed the introduction of uniform weights and measures in Mārwār, and in his time the district of Nāgaur was lost. He is described as a great athlete and in stature almost gigantic, but he appears to have spent most of his time at Chitor where he interfered in Mewār politics and was eventually assassinated while attempting to usurp the throne of the infant Rānā Kūmbha. He left twenty-four sons whose issue form the great vassalage of Mārwār.

Rao Jodha, 1444–88.

The next chief was Jodha, the eldest son of Ran Mal, who was born in 1415, succeeded in 1444 and died in 1488. He was a man of great vigour and capacity, and a very successful ruler who fully recognised the worth of his allodial proprietors, whom he commemo-

rated in the hall of heroes at Mandor. After annexing the district of Sojat in 1455, he laid the foundation of Jodhpur city in 1459 and transferred there the seat of government. His daughter, Sāranga Devī, was married to Rānā Rai Mal of Mewār, and of his numerous sons—he is said to have had fourteen or seventeen—the eldest, Sātal, succeeded him; the sixth was Bīka, the founder of the Bīkaner State; and the fourth was Dūda who established himself at Merta (whence the Mertia sept of the Rāthors takes its name), gave his daughter Mīrān Bai in marriage to Rānā Kūmbha, and was himself the grandfather of the heroic Jai Mal* who defended Chitor against Akbar in 1567 and whose descendants are the Thākurs of Badnor in the Udaipur State. Founds Jodhpur city, 1459.

Rao Sātal ruled for only three years (1488—91); he built the fort of Sātalmer near Pokaran in the north-west and was killed in a battle with the *Sūbahdār* of Ajmer. His successor was his brother Sūja or Sūraj Mal, remembered as the cavalier prince who in 1516 met his death in a fight with the Pathāns at the Pīpār fair, while rescuing 140 Rāthor maidens who were being carried off. He was followed by his grandson Ganga, whose uncle (Sanga) contested his right and called in the aid of Daulat Khān Lodī. Then followed a civil strife which was terminated by the ignominious defeat of the Afghān in an engagement in which Sanga was slain. About ten years later, the Rāthors were called on to unite their forces with those of Mewār to oppose the invasion of Bābar. The famous Rānā Sangrām Singh led the Rājputs, and Rao Ganga "deemed it no degradation to acknowledge his supremacy and send his quotas to fight under his standard," but this the last confederation made by the Rājputs for national independence was defeated on the fatal field of Khānua† (12th March 1527), and Rai Mal, the grandson of Ganga, with the Mertia chieftains, Khet Singh and Ratna, and many other Rāthors of note were slain. Ganga died about five years after this event and was succeeded by his son Māldeo, the most valiant and energetic Rājput of his time.

The position of Mārwār at this period was eminently excellent for the increase and consolidation of its resources. The emperor Bābar found nothing in its sterile lands to tempt him from the rich plains of the Ganges, where, moreover, he had abundant occupation; and the districts and strongholds on his south-western frontier, still held by the officers of the preceding dynasty, were rapidly acquired by Māldeo who became, in the words of Firishta, "the most powerful prince in Hindustān." Mirza Hādi in his preface to Jahāngīr's Memoirs has the following remark:—"Rājā Māldeo was so powerful that he kept up an army of 80,000 horse. Although Rānā Sanka (Sangrām Singh), who fought with *Firdaus—makānī* (Bābar), possessed much power, Māldeo was superior to him in the number of soldiers and the extent of territory; hence he was always victorious." Rao Māldeo, 1532–62 (or 1569).

* See Vol. II-A of this series, pages 19—20 and 90.
† See Vol. II-A, page 18.

In the course of ten years, by reducing many local hereditary chieftains under his sway, Rao Māldeo had increased his possessions on every side so that they comprehended all the present country of Jodhpur, including Merta, Nāgaur and Phalodi, parts of Bīkaner and Jaisalmer, Ajmer with several other smaller districts, and a large portion of Amber or Jaipur, which brought him close on the limits of Agra and Delhi. At this period, Mārwār undoubtedly reached its zenith of power, territory and independence. Moreover, Māldeo not only acquired but determined to retain his conquests, and with this end in view erected numerous fortifications. He enclosed Jodhpur with a strong wall, besides building a palace and adding other works to the citadel; the circumvallations of Merta and its fort (which he called Mālkot) are said to have cost him about 2½ lakhs; and he fortified Pokaran (which he took from the Bhātis), Bhadrājan, Siwāna, Gūndoj, Rian, Pīpār, Dūnāra, and other places. His internal policy included a regulation of the feudal allotments and prevention of their extreme division by the creation of a perpetual gradation of ranks. Ten years were granted him to perfect his designs ere his cares were diverted from these to his own defence.

When the emperor Humāyūn was driven from the throne by Sher Shāh, he sought in vain the protection of Māldeo, but the latter derived no advantage from this inhospitality for Sher Shāh in 1543 or 1544 led an army of 80,000 men against him. Well aware of the difficulty of the enterprise, the Afghān advanced with a caution quite unusual at that time. Wherever his troops were to pass the night, he caused a trench and rampart to be thrown up round the camp and guarded it with the utmost care and vigilance. On reaching the sandy desert, when it was impossible to throw up works, he caused bags to be filled with sand and ranged them as a defensive wall. On the frontiers of Ajmer, Māldeo met him at the head of 50,000* Rājput horse, and the two armies lay for a month in sight of each other, daily engaging in sharp skirmishes. The Rājputs were at this time as formidable as any enemy in the east, and Sher Shāh, met by this powerful array of warriors, constrained in his movements and straitened in his supplies, would willingly have retreated; but, besides the loss of reputation, the danger of a backward movement in the sight of such a force was much to be dreaded.

In this exigency, finding it necessary to attempt something, the artful Afghān at length resorted to a stratagem, suggested, it is said by some petty Rājput chieftains who had joined his camp. He forged a letter (in Hindī) in the name of some of Māldeo's generals and addressed to himself, setting forth that "having been conquered by the Rājā, they had through necessity served him till then with fidelity, but were in secret very weary of his yoke, and that if Sher Shāh would reinstate them in their former possessions, they were willing to make him a due acknowledgment for the favour". On this letter Sher Shāh wrote a few words in Persian to the effect that

*And, according to the *Makhzan-i-Afghānī*, 300,000 infantry!

their request would be complied with, and arranged that the correspondence should fall into Māldeo's hands. The latter, believing it to be genuine, put off the battle which was to have been fought that very day, and the more that his gallant Rājputs, who confidently anticipated a victory, urged him to an instant attack, the more was he convinced of their treachery, and he soon after ordered a retreat. One of his principal nobles, Kūmbha, endeavoured to persuade Māldeo of his mistake and, finding that this was impossible, resolved to wipe off the aspersion thrown on the Rājput name by attacking the enemy. As Māldeo commenced his retirement one night, Kūmbha with eight or ten thousand men marched to surprise the Afghāns, but their route lay over rough and broken ground, they became divided and the greater number lost their way, so that only about four thousand reached the hostile camp at daybreak. Sher Shāh immediately formed and came out against them, but was repeatedly repulsed, and this handful of brave Rājputs would certainly have gained a complete victory had not Jalāl Khān, an Afghān general, come up with a fresh body of troops in compact order. The Rājputs were surrounded and assailed on every side by showers of arrows, and in the end Kūmbha* with about two thousand of his most devoted followers fell bravely fighting. After the battle was over, Sher Shāh, seeing the havoc that had been made in his army, is said to have exclaimed "How nearly had I thrown away the empire of Delhi in seeking for a handful of *bājra*!"—an allusion to the poverty of the soil of Mārwār as unfitted to produce richer grain. Māldeo meanwhile continued his retreat towards Siwāna, and soon discovered with grief and self-reproach the artifice to which he had sacrificed the success of his campaign and the glory of his arms, as well as the injustice he had done to his countrymen. Sher Shāh had already suffered too much in this expedition to venture to follow up his success and, turning south, marched into Mewār for the professed purpose of reducing Chitor.

Akbar on succeeding to the throne of Delhi in 1556, immediately despatched an army under Muhammad Kāsim Khān which captured Nāgaur and Ajmer in the following year, and these places for a long time marked the south-western frontier of his empire. In 1558, the fort of Jaitāran was taken by a force under Saiyid Mahmūd Bārha, and in 1561 Mirza Sharaf-ud-dīn was sent to effect the conquest of Merta which was held by the Rāthors Jai Mal (or Jagmal) and Devī Dās. "Great exertions were made on both sides, but at length it was agreed that the garrison should march out with their horses and arms, but leave behind all their property and effects. When the victorious army went to take possession of the fort, Jai Mal marched out with his men, but Devī Dās, in shame and pride, set fire to the property which was in the fortress, and then sallied forth at the head of a party of Rājputs and passed in front of the royal army. Sharaf-ud-dīn and other nobles followed him, and when they came up with

*According to the *Tārīkh-i-Sher Shāhi*, this gallant band of Rājputs was led by Jaya Chandel and Gohā, both of whom were slain by Khawās Khān.

him, he turned round and attacked them. Many of the royal soldiers fell, and nearly two hundred Rājputs were slain. Devī Dās himself was unhorsed and, being overtaken as he lay upon the ground, was cut to pieces.* The fort of Merta was then occupied by the imperial forces (in 1562)".

According to some authorities, Rao Māldeo died in 1562, while others say that he lived till 1568 or 1569 and, to appease Akbar, who was then at Ajmer, sent his son, Chandra Sen, to him with gifts, but the emperor was so dissatisfied with the disdainful bearing of the desert chief who refused personally to attend his court that he besieged Jodhpur, forced the Rao to pay homage in the person of his eldest son, Udai Singh, and, assuming a superiority to which he was not entitled, presented to the Bīkaner chief, Rai Singh, a scion of the Jodhpur house, the formal grant for Jodhpur itself together with the leadership of the clan.

Rao Māldeo died shortly afterwards, and then commenced a civil strife between his two sons, Udai Singh and Chandra Sen, ending in favour of the latter who, though the younger, was the choice both of his father and the nobles. Very little is known of Chandra Sen except that he was no friend of Akbar and was on more than one occasion besieged by imperial troops in his stronghold of Siwāna. His death occurred about 1581 or 1583, and he was succeeded by his elder brother, Udai Singh.

Rājā Udai Singh, 1581-95.

The period now reached forms an important epoch in the annals of this State inasmuch as its ruler for the first time acknowledged the supremacy of the Mughal empire. By giving his sister Jodh Bai† in marriage to Akbar and his daughter Mān Bai to the prince Salīm (Jahāngīr), Udai Singh recovered all the former possessions of his house, with the exception of Ajmer, and obtained several rich districts in Mālwā and the title of Rājā. Abul Fazl mentions him as the commander of 1,000, but the *Tabakāt-i-Akbarī* says that he was in 1593 a commander of 1,500; and he is universally known as the *Motā Rājā* (literally, "the fat prince", but possibly signifying the "great" or "good" or "potent" prince). His Rāthors performed many signal services for the emperor, and he himself accompanied Sādik Khān on the expedition against the chief of Orchhā in Bundelkhand (in 1577) and served in Gujarāt with Muzaffar Khān in 1583, but latterly was "too unwieldy for any steed to bear him to battle". Within his own territory, Udai Singh ruled with a strong hand, chastising the nobles who had sided with his brother, Chandra Sen, against him, and confiscating many villages of the Chārans. He had a numerous progeny—thirty-four legitimate sons and daughters—and died in or about 1595, being succeeded by his eldest (or, as some say, his sixth) son, Sūr Singh. Among his other sons may be mentioned Kishan Singh, the first chief of the Kishangarh State, and Kesu or

* The quotation is from the *Tabakāt-i-Akbarī*, but some say that he was wounded and escaped.

† Blochmann thought that Jodh Bai was the daughter of Udai Singh and the wife of Jahāngīr. (*Ain-i-Akbari*, Vol. I, page 619, Calcutta, 1873.)

Kesri Singh who was the founder of the Pisāngan *istimrāri* estate in the Ajmer District, while one of his great-grandsons, Ratan Singh, founded Ratlām in the Central India Agency.

Sūr Singh was serving with the emperor's army at Lahore, where he had commanded since 1592, when intelligence reached him of his father's death. His military talents and brilliant services had obtained for him, even during his father's life, the title of Sawai Rājā, and he is said to have held a *mansab* of 4,000, subsequently raised to 5,000, though this is doubtful as his name does not appear in the list of *mansabdārs* given by Abul Fazl. By command of Akbar, he reduced Rao Sūrthān, the chief of Sirohī, and for services rendered in Gujarāt and the Deccan under the princes Murād and Dāniyāl, he received five fiefs in the former, and one in the latter province. Rājā Sūr Singh died in the Deccan in 1620; he added greatly to the lustre of the Rāthor name, was esteemed at court and, as the bard expresses it, "his spear was frightful to the southron," but he greatly lamented the necessity of having to serve the emperor in parts distant from his native land and is said to have caused a column to be erected on which were engraven words cursing any of his race who should ever in the future even once cross the Narbadā.

Rājā Sūr Singh, 1595-1620.

The next chief was Gaj Singh, the eldest son of Rājā Sūr Singh, who had already earned the favour of the emperor by his gallantry at the escalade of Jālor and by fighting against Rānā Amar Singh of Mewār. Like his father, he is said to have been a *mansabdār* first of 4,000 and subsequently of 5,000, but he served with even greater distinction, and was nominated viceroy of the Deccan, besides receiving several districts in *jāgīr*. In at least eight sieges and battles his Rāthors had their full share of glory and earned for their leader the titles of *Dalthamna* (barrier of the host) and *Dalbhanjan* (destroyer of the army), and, as a special mark of favour, the horses of his contingent of cavalry were exempted from being branded with the imperial mark. *Rājā Gaj Singh died in 1638* either at Agra or while suppressing an insurrection in Gujarāt, and left a distinguished name in the annals of his country and two valiant sons to maintain it.

Rājā Gaj Singh, 1620-38.

The elder of these sons, Amar Singh, had been disinherited in 1634 in consequence of his violent disposition and turbulent conduct, and the younger, Jaswant Singh, consequently succeeded to the *gaddi*. He was the first ruler of Mārwār to hold the title of Mahārājā, and his career was the most remarkable in the history of this State. More than once the destinies of India lay in his hands, and the fate of Dārā and the fortunes of Aurangzeb were alike at his disposal. The traveller Bernier describes him as "one of Alamgīr's best generals, holding the rank of commander of 7,000."

Mahārājā Jaswant Singh I, 1638-78.

During the first twenty years of his rule he was engaged mostly in Gondwāna and the Deccan under Aurangzeb and greatly distinguished himself. When Shāh Jahān fell ill towards the end of 1657 and Dārā was invested with the powers of Regent, Jaswant Singh was appointed viceroy of Mālwā and received the command of the army despatched against Aurangzeb and Murād, who were then in rebellion

against their father. He marched towards the Narbadā and encamped at a place fifteen miles south of Ujjain, since named Fatehābād. Aurangzeb was the first to appear and could easily* have been crushed as his army was much fatigued by a long march and the excessive heat of the weather, but Jaswant Singh, anxious to triumph over two princes in one day, purposely delayed his attack until Murād had also come up, and in the end suffered a severe defea. The battle was fought on the 20th April 1658 and has been described by several writers, but, as Bernier was himself present, his account must be considered the most authentic, and it is as follows: "His army having rested two or three days, Aurangzeb made the necessary dispositions for forcing the passage. Placing his artillery in a commanding position, he ordered the troops to move forward under cover of its fire. His progress was opposed by the cannon of the enemy, and the combat was at first maintained with great obstinacy. Jaswant Singh displayed extraordinary valour, disputing every inch of ground with skill and pertinacity. With regard to Kāsim Khān,† although it cannot be denied that he deserved the celebrity he had hitherto enjoyed, yet upon the present occasion he proved himself neither a dexterous general nor a courageous soldier; he was even suspected of treachery, and of having concealed in the sand, during the night that preceded the battle, the greater part of his ammunition, a few volleys having left the army without powder or ball. However this may be, the action was well supported, and the passage vigorously opposed. The impetuosity of Murād at length overcame every impediment; he reached the opposite bank with his corps, and was quickly followed by the remainder of the army. It was then that Kāsim Khān ingloriously fled from the field, leaving Jaswant Singh exposed to the most imminent peril. That undaunted Rājā was beset on all sides by an overwhelming force, and saved only by the affecting devotion of his Rājputs, the greater part of whom died at his feet. Fewer than six hundred of these brave men, whose number at the commencement of the action amounted to nearly eight thousand, survived the carnage of that dreadful day. With this faithful remnant the Rājā retired to his own territory, not considering it prudent to return to Agra on account of the great loss he had sustained."

The battle of Fatehābād, 1658.

Dow and other historians give a very similar account of the battle, and it is only Khāfī Khān, the author of the *Muntakhab-ul-Lubāb*, who writes in a different strain :—"Every minute the dark ranks of the infidel Rājputs were dispersed by the prowess of the followers of Islām. Dismay and great fear fell upon the heart of Jaswant, their leader, and he, far from acting like one of the renowned class of Rājās, turned his back upon the battle, and was content to bring upon

* Bernier writes : "Such was the opinion entertained by every spectator, especially by the French officers in Aurangzeb's artillery." He adds that Jaswant Singh stayed his hand in consequence of secret orders from Shāh Jahān.

† Nawāb Kāsim Khān, a soldier of first-rate reputation, sincerely attached to Shāh Jahān but disliking Dārā ; he assumed the command very reluctantly, and only in obedience to the emperor.

himself everlasting infamy. Kāsim Khān also, with other imperial officers and the forces of Dārā, took to flight."

A few months later, Aurangzeb deposed his father and usurped the throne, and one of his first acts was to send assurances of pardon to Jaswant Singh and summon him to join the army then being collected against Shujā. The Mahārājā obeyed the summons, but he did so only to be revenged, for when (in 1659) the troops of the rival brothers were about to join battle at the village of Khajuhā in the Fatehpur District of the United Provinces, he wheeled about, cut to pieces Aurangzeb's rear-guard, plundered his camp, and marched with the spoils to Jodhpur. It was then his intention to assist Dārā against the emperor, but he allowed himself to be bribed by the latter with the viceroyalty of Gujarāt and remained neutral in the contest.

He subsequently served under prince Muazzam in the Deccan, where he opened a correspondence with the Marāthā leader, Sivajī, and planned the death of the imperial general, Shāistā Khān. Aurangzeb, becoming aware of these transactions, replaced Jaswant Singh by Mirza Rājā Jai Singh of Amber (Jaipur), who soon brought the war to a conclusion by the capture of Sivajī, but, when he learnt that the emperor had designs upon the life of his prisoner, for whose safety he had pledged himself, he connived at his escape. Thereupon Jaswant Singh was once more sent with supreme power to the Deccan* but, as he immediately began to incite Muazzam to rebel against his father, he was recalled and appointed as viceroy of Gujarāt. On reaching Ahmadābād, he found it had been a trick to draw him from the Deccan and he continued his journey to his own country. Finally Aurangzeb, finding him too powerful a foe to be either forgiven or openly subdued, resolved to get rid of him by sending him to a distance. A rebellion had opportunely broken out at Kābul, and Jaswant Singh was ordered to quell it. Leaving his eldest son, Prithwī Singh, in charge of his ancestral domains, he set out with his wives and family, but had hardly reached Kābul when Aurangzeb summoned Prithwī Singh to court, treated him with marked affability and, as a sign of favour, gave him a robe of honour, but the robe was poisoned and Prithwī Singh expired a few hours later in great agony. When the news of his son's death reached Jaswant Singh, he broke down utterly and, his two other sons having fallen victims to the rigours of the climate, he died of a broken heart in December 1678 at Jamrūd.

The life of Jaswant Singh was one of the most extraordinary in the annals of Rājputāna. Had his abilities, which were far above mediocrity, been commensurate with his power, credit, and courage, he might, with the aid of the many powerful enemies of Aurangzeb, such as Rānā Rāj Singh of Mewār, Rājā Jai Singh of Amber, and Sivajī, have overturned the Mughal throne. In his rule of forty years, events of magnitude crowded upon each other from the period of his first contest with Aurangzeb in the battle of Fatehābād to his

* Jaswantpura, a village near Aurangābād, is still held by the Mahārājā of Jodhpur as a memorial of Jaswant Singh's exploits in the Deccan.

"conflicts with the Afghāns amidst the snows of the Caucasus." Although he had a preference among the sons of Shāh Jahān, esteeming the frank Dārā above the crafty Aurangzeb, yet he detested the whole race as inimical to the religion and independence of his own; and he only assisted any of the brothers because he hoped that their struggles for empire would end in the ruin of them all, and secure for himself freedom and independence. He neglected no opportunity which gave a chance of revenge and was throughout aware of Aurangzeb's wily nature, but against the hypocrisy and superior strength of a determined foe he could not but resort to fraud and treachery, and hence his acceptance of one viceroyalty after another.

Mahārājā Ajīt Singh, 1679-1724.

At the time of Jaswant Singh's death, his wife was in the seventh month of her pregnancy and having been dissuaded from becoming *satī*, she proceeded to Lahore* and there gave birth to a boy, who was called Ajīt Singh. As soon as she was able to travel, she set out on her return home and, on reaching Delhi, was commanded by Aurangzeb, whose vengeance had not yet been satiated, to surrender her son. The Rāthors who formed her escort were also promised a partition of Mārwār among them in the event of their persuading her to comply, but they faithfully stood by the mother of their infant chief and, when the emperor attempted to take forcible possession of him, fought a memorable battle in the streets of Delhi in which they gained not only a victory but time to send away the child in a basket of sweetmeats. Ajīt Singh was safely conveyed to the mountain fastnesses of his own country (the Chappan-kā-pahār near Siwāna) where he was kept till the day of danger had passed and he was in a position to proclaim himself.

The above account is taken from the local chronicles; another version will be found in Tod's *Rājasthān*, Vol. II, pages 59-61; a third in Elliot's *History of India*, Vol. VII, pages 297-298; and a fourth in Malleson's *Native States of India*, pages 49-50.

Shortly afterwards, Aurangzeb invaded Mārwār, sacked Jodhpur and all the large towns, destroyed the Hindu temples, erected mosques, and commanded the conversion of the Rāthors to Muhammadanism; but, in determining to compel the Rājputs to his faith, he was measuring the heavens, and his fanatical policy recoiled not only on himself but his whole race, for it cemented into one bond of union all who cherished either patriotism or religion, and in the wars that ensued the emperor gained little of either honour or advantage. About 1680 or 1681 prince Akbar seceded from his father and joined the Rāthors who promised to support him in a dash at the throne, but the allies were dispersed by a stratagem on the part of Aurangzeb and forced to retire to the Deccan. During the next six years, several desultory but bloody affrays took place between the combatants, and numerous forts were captured and recaptured. In 1687, Ajīt Singh issued from his concealment and was acknowledged by his leading clansmen. In the following year the imperial forces were

* Tod says that Ajīt was "born amidst the snows of Kābul."

driven for a time from the country, and in 1691 the *Hākim* of Ajmer was compelled to pay his obeisance, but, three years later, Ajīt Singh was again forced to take shelter in the hills, and in 1695 he married the niece of Rānā Jai Singh of Mewār. During the next five years, Aurangzeb was fully occupied in the Deccan, the Rāthors had time to breathe, and in 1701 Ajīt Sing regained possession of his ancestral abode and celebrated the event by slaying a buffalo at each of its five gates. Two years later, however, some of his nobles deserted to the foe, and Azam Shāh seized the capital which became a prey to Moslem fanaticism and cupidity. Ajīt Sing retired to Jālor, where a son, Abhai Singh, was born to him, and shortly afterwards recovered Merta and defeated the imperial troops at Dūnāra.

At length, in 1707, Aurangzeb, "the scourge of the Rājputs," died at Ahmadnagar in the Deccan, and Ajīt Singh, smarting under twenty-eight years of personal misery and anarchy, hurried to his capital, ejected the Musalmān governor, and slaughtered or dispersed the imperial garrison. At this time a battle was raging near Agra between Aurangzeb's sons, Shāh Alam and Azam Shāh, in which the former, afterwards called Bahādur Shāh, was successful. He pretended to be friendly towards Ajīt Singh, whom he enticed* out of Jodhpur for the alleged purpose of drawing up a treaty of peace and friendship, but in reality he coveted the place, and stealthily sent an army to seize it. Disgusted at this treachery, Ajīt Singh left Bahādur Shāh and proceeded to Udaipur, where he became (in 1708) a party to the triple alliance with Rānā Amar Sigh II of Mewār and Mahārājā Sawai Jai Singh of Amber to throw off the Muhammadan yoke. It was one of the conditions of this alliance that the chiefs of Jodhpur and Jaipur should regain the privilege of marriage with the Udaipur family, which they had forfeited by contracting matrimonial alliances with the Mughal emperors, on the understanding that the offspring of the Udaipur princesses should succeed to the State in preference to all other children.

This having been arranged, the two Mahārājās, Ajīt Singh and Jai Singh, marched to Jodhpur (whence they expelled the governor placed there by Bahādur Shāh) and next *viâ* Merta and Ajmer to Sāmbhar, where they gained a complete victory in 1709, and, a year or two later, forced the emperor to make peace. Yet Ajīt Singh's troubles were not over, for when the Saiyid brothers, "the Warwicks of the east," were in power, they called upon him to mark his subservience to the Delhi Court in the customary manner by sending a contingent headed by his heir to serve. This he declined to do, so his capital was invested, his eldest son (Abhai Singh) was taken to Delhi as an hostage, and he was compelled, among other things, to pay capitation-tax, tolerate the killing of kine, himself repair to the imperial court, and give his daughter (Indra Kunwar) in marriage† to Farrukh Siyar.

* The Musalmān historians say that Ajīt Singh knew that submission alone could save him and his family and property, so he came and "expressed his sorrow, humility and obedience" and was "honoured with the gift of a robe, elephant, etc."

† The last instance of a Mughal sovereign marrying a Hindu princess.

To this marriage may be ascribed the rise of the British power in India, for Farrukh Siyar was at the time afflicted with a dangerous white swelling or tumour on the back, rendering necessary a surgical operation to which the faculty of the court were unequal, retarding the celebration of the nuptials between him and the Rāthor princess, and even threatening a fatal termination. A mission from the British merchants at Surat was at that time at Delhi, and, as a last resource, the surgeon attached to it, Mr. Hamilton, was called in. He cured the malady, and made the emperor happy in his bride; and, when asked to name his reward, he demanded a grant of land for a factory on the Hooghly for his employers. It was accorded, and to his disinterested patriotism the British owe the first royal grant or *firmān* conferring territorial possession and great commercial privileges. "Such an act deserved at least a column; but neither trophied urn nor monumental bust marks the spot where his remains are laid."

This compulsory marriage and the sight of the altars raised over the ashes of the Rāthor chieftains who had perished to preserve him in his infancy kindled all the wrath of Ajīt Singh, but for the moment he entered into the views of the Saiyids with the true spirit of his father, and returned to Jodhpur in 1715, after obtaining the viceroyalty of Gujarāt as the heavy price of his coalition with them. In the two succeeding years he visited and settled that province, but in 1718 he was required at Delhi where the Saiyids and their opponents were engaged in civil strife. Here he formed a league with Abdullah (one of the king-makers) to oppose Mahārājā Jai Singh of Amber and the Mughals, and he received from Farrukh Siyar the *mansab* of 7,000 and the addition of a crore of *dāms* ($2\frac{1}{2}$ lakhs of rupees) to his rent-roll, as well as the insignia of *māhī murātib*, elephants, horses and jewels. In 1719 Farrukh Siyar was murdered, whereupon Ajīt Singh, declining to sanction any further the nefarious schemes of the Saiyids, returned to Jodhpur with his daughter,* the late king's widow, and left his son, Abhai Singh, behind at Delhi. In the following year the Saiyid brothers were assassinated, and Ajīt Singh had no difficulty in annexing Ajmer, the salt-lakes of Sāmbhar and Dīdwāna, and other places. He had now reached the supreme moment in his eventful life, for he began to coin money in his own name, introduced his own weights and measures, established courts of justice, regulated the ranks of his nobles on a new scale, and routed with heavy loss the Mughal armies that were sent to recover Ajmer, but he had to surrender that fortress to Muhammad Shāh in 1723. In the very next year was committed "the foulest crime in the annals of Rājasthān," namely the murder of Ajīt Singh under the following circumstances. Abhai Singh, the heir apparent,

* According to the *Muntakhab-ul-Lubāb*, he took back his daughter "with all her jewels and treasure and valuables, amounting to a crore of rupees in value. According to report he made her throw off her Musalmān dress, dismissed her Muhammadan attendants, and sent her to her native country. In the reign of no former emperor had any Rājā been so presumptuous as to take his daughter after she had been married to a king and admitted to the honour of Islām."

who spent much of his time at Delhi, had been persuaded that the only mode of arresting the ruin of Mārwār and hastening his own elevation was the murder of his father, and he accordingly wrote to his brother, Bakht Singh, suggesting that he should carry this out and promising him Nāgaur and its 555 villages as a reward. Not only was Bakht Singh unstartled by the proposition, but he executed the deed with his own hands. Eighty-four *satīs* are said to have taken place on this dire occasion, the mother of these unnatural sons leading the procession, and so much was Ajīt beloved that even men devoted themselves on his pyre.

Thus closed the career of one of the most distinguished chiefs who ever occupied the *gaddi* of Jodhpur. He was possessed of great vigour of mind as well as of body; valour was his inheritance, but his talent for intrigue was not commensurate with his boldness, though he played the role of king-maker with great effect. The one stain on his fair name was the banishing of the heroic Durgā Dās, the preserver of his infancy, the instructor of his youth, and the guide of his manhood, who, by repeated instances of exalted self-denial, had refused wealth and honours that might have raised him from his vassal condition to an equality with his chief.

Mahārājā Abhai Singh, 1724-50.

Abhai Singh succeeded his father as ruler of Mārwār, and was invested by Muhammad Shāh who included Nāgaur in his *sanad*. That district was held by Indra Singh, another Rāthor, but Abhai Singh at once took it from him and subsequently made it over to his brother, Bakht Singh, the parricide. In 1730 he was appointed viceroy of Gujarāt and Ajmer, and placed at the head of an army with orders to suppress the rebellion of Sarbuland Khān in the former of these provinces. Leaving Delhi in June of the same year, he proceeded first to Ajmer, where he installed his officers, and next to Jodhpur, where he halted while his troops gradually assembled. Thence he marched *viâ* Siwāna, Jālor, Sirohi, Pālanpur and Sidhpur, and eventually (in 1731) reached Ahmadābād which he carried by storm after besieging it for three days. Sarbuland Khān was wounded and surrendered with all his effects, and Abhai Singh, having left a garrison of 17,000 men for the duties of the capital and province, returned to Jodhpur with the spoils of victory (said to have been four crores of rupees and 1,400 guns of all calibres, besides military stores), and with these, in the declining state of the empire, he strengthened his forts and garrisons, and determined, in the general scramble for dominion, not to neglect his own interests.

The only other events of this period that are deserving of mention are a desultory siege of Bīkaner and a war between Jodhpur and Jaipur, brought about by Bakht Singh, whose appanage of Nāgaur was too restricted a field for his talents and ambition. Bakht Singh, however, finding that matters had gone further than he intended, rejoined Abhai Singh and offered to bear the entire brunt of the battle—a proposal to which Abhai Singh, whose love of ease and opium increased with his years, and who was in no way averse to see his brother punished, assented. In the engagement that ensued at

Gangwāna in the Ajmer District, Bakht Singh led the Rāthors who charged through and through the lines of the Kachwāhas and forced Mahārājā Jai Singh to retire. The latter, however, gained his point, namely the raising of the siege of Bīkaner, and the Rānā of Udaipur mediated to prevent the quarrel going further.

Abhai Singh died in 1750; his courage, which may be termed ferocious, was tempered only by his excessive indolence, regarding which there are many amusing anecdotes. He was famous for his strength, and his ambition was to be considered the first swordsman in Rājwāra. It his time (1739) Nādir Shāh invaded India, but the summons to the Rājput chiefs to put forth their strength in support of the tottering throne of Tīmūr was received with indifference.

Mahārājā Rām Singh, 1750-52.

Abhai Singh was succeeded by his son, Rām Singh, a youth of an impetuous and overbearing disposition, who ruled for only two years. Throughout this period, there was constant fighting between him and his uncle, Bakht Singh, and eventually he was utterly defeated in a sanguinary battle near Merta in 1752, and forced to flee to Ujjain, where he found Jai Appa Sindhia and with him concerted measures for the invasion of his country.

Mahārājā Bakht Singh 1752-53.

Bakht Singh then became Mahārājā of Jodhpur, but in the following year (1753) met his death by means, it is said, of a poisoned robe given him by his aunt or niece, the wife of the Jaipur chief; he left a disputed succession and all the horrors of impending civil strife to his son, Bijai Singh. Of Bakht Singh, Tod writes thus:—"There was a joyousness of soul about Bakhta which, united to an intrepidity and a liberality alike unbounded, made him the very model of a Rājput. To these qualifications were superadded a majestic mien and herculean frame, with a mind versed in all the literature of his country, besides poetic talent of no mean order; and, but for that one damning crime, he would have been handed down to posterity as one of the noblest princes Rājwāra ever knew. He completed the fortifications of the capital, and greatly added to the palace of Jodha from the spoils of Ahmadābād. Had he been spared a few years to direct the storm then accumulating, which transferred power from the haughty Tātar of Delhi to the peasant soldier of the Kistna, the probability was eminently in favour of the Rājputs resuming their ancient rights throughout India."

Mahārājā Bijai Singh, 1753-93.

On Bakht Singh's death, his son, Bijai Singh, was installed as Mahārājā at Mārot, but hardly had he received the homage of his people when he was called upon to meet his cousin Rām Singh who was advancing with an army to claim his birthright, assisted by the Marāthās. The battle which ensued on the plains of Merta (about 1756) was of the most desperate description, and two accidents occurred, each of which was sufficient to turn victory from the standard of Bijai Singh. In the first place, the Jodhpur troops mistook a body of their own cavalry, just returning from a successful charge, for the enemy and proceeded to mow it down with discharges of grape-shot; and subsequently they were taken in by a ruse on the part of Sardār Singh of Kishangarh, himself a Rāthor who had joined Rām Singh's

side. As a last resort, Sardār Singh despatched a horseman to the division which pressed them most with a message to the effect that there was nothing for them to fight for, as their chief, Bijai Singh, was lying dead in another part of the field. Not a man enquired into the truth of the report; the Jodhpur army, with victory in its grasp, retired panic-stricken, and Bijai Singh escaped with difficulty to Nāgaur.

With the loss of this battle, the strongholds rapidly fell and the cause of Rām Singh was triumphing. Bijai Singh held out gallantly in Nāgaur, but of other important towns, only the capital and Jālor, Siwāna and Phalodi had not been reduced; and in this extremity he listened to an offer to relieve him from the lacerations of the Marāthās. A Rājput and an Afghān, both foot-soldiers on a small monthly pay, volunteered, if their families were provided for, to sacrifice themselves for his safety by assassinating Jai Appa. Assuming the garb of camp-sutlers, they proceeded to the tent of the Marāthā, feigning a violent quarrel, and, as he listened to their story, they stabbed him simultaneously. The alarm was immediately given, and the Afghān was slain, but the Rājput, mingling with the throng, escaped by a drain into Nāgaur.* The siege continued for a time, but eventually a compromise was made by which the Marāthās abandoned the cause of Rām Singh and received from the Rāthors the fort and district of Ajmer as blood-money, and the promise of a fixed triennial tribute.

Rām Singh, deserted by his allies, continued for a time to assert his rights, but at length accepted the Jodhpur share of the Sāmbhar lake, and, Jaipur relinquishing the other portion, he resided there until his death in 1773. The adversity of his later days had softened the asperity of his temper and caused his early faults to be forgotten, though too late for his benefit. His person was described as gigantic, his demeanour affable and courteous, and he was generous to a fault. His understanding was excellent and well-cultivated, but his capricious temperament, to which he gave vent with an unbridled vehemence, disgusted the high-minded nobles of Mārwār, and involved him in exile and misery to his death. But in spite of his errors, the fearless courage he displayed against all odds kept some of the most valiant of the clans constant to his fortunes, especially the brave Mertias under the heroic Sher Singh of Rian, whose deeds can never be obliterated from the recollection of the Rāthor.

The death of Rām Singh was, however, no panacea to the troubles of Mārwār or of its chief. The Marāthās from their *point d'appui* in Ajmer continued to foster disputes which tended to their advantage and, when opportunity offered, scoured the country in search of pay or plunder. Bijai Singh was left resourceless, his ruinous wars and still more ruinous negotiations having exhausted the hoards of wealth accumulated by his predecessors; the crown lands were uncultivated,

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* Grant Duff says that the two men who killed Jai Appa visited him as "accredited negotiators." A different account will be found in Elliot's *History of India* Vol. VIII, pages 209-10.

the tenantry dispersed, and the nobles, proud of the strength they had displayed in rescuing the *gaddi* of Ajīt Singh from the despotism of the empire, and demoralised by alternate favour or disgrace as they had adhered to or opposed the successful claimant for power, were entirely out of hand. To escape from their tutelage, Bijai Singh raised a standing mercenary force in Sind to serve as guards for the capital, and with its help he treacherously murdered some of his leading chieftains, such as the Thākurs of Awā and Pokaran.

For a time the feudal interest was restrained, anarchy was allayed, commerce flourished, general prosperity revived, and, in the words of the chronicle, "the tiger and the lamb drank from the same fountain." Bijai Singh took the best means to secure the fidelity of his nobles by finding them occupation; he led them against the robbers of the desert and conquered Umarkot,* curtailed the territories of Jaisalmer, and added the rich province of Godwār from the Rānā of Mewār. The tract last mentioned had been wrested from the Parihār chief of Mandor by the Sesodias before Jodhpur city was built, and had been made over temporarily to Jodhpur by Rānā Ari Singh II (1761-73), in order to preserve it from the pretender, Ratna. Bijai Singh declined to give it up and, as the Rānā was not strong enough to recover it, it passed into the permanent possession of the Rāthors.

The country had enjoyed several years of peace when the rapid strides made by the Marāthās towards universal rapine, if not conquest, compelled the Rājputs once more to form a union for the defence of their political existence. The rival armies met at Tonga near Lālsot in Jaipur territory in 1787, and the Mughal generals, Muhammad Beg and Ismāil Beg, added their forces to those of the allied Rājputs. In the battle that ensued the Rāthors had their full share of glory, the Thākur of Rian particularly distinguishing himself, and Sindhia was routed and compelled to abandon not only the field but all his conquests for a time. By this victory Bijai Singh recovered Ajmer, and declared his tributary alliance with the Marāthās to be null and void. Sindhia soon returned, however, and in 1790† defeated the Rājputs in the murderous engagements at Pātan (in the Jaipur State) on the 20th June and at Merta on the 10th or 12th September†, imposed on Jodhpur a fine of sixty lakhs of rupees, and recovered Ajmer which was thus lost for ever to the Rāthors.

Grant Duff in his account of the battle of Pātan hardly mentions the Rājputs, but says that "Ismāil Beg fought with his usual bravery,

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* A *tāluk* and town now in the Thar and Pārkar District of Sind. It was acquired by the Rāthors in 1780, but was wrested from them in 1813 by the Talpur Amīrs. After the conquest of Sind (1843), the Government of India promised to restore the tract to the Mahārājā but, as the fort was a valuable frontier post and the district could not be controlled by Jodhpur, it was deemed best for Government to retain possession and give the Mārwār Darbār Rs. 10,000 a year.

† In Vol. I of his *Rājasthān*, Tod gives the date of the battle of Merta as 10th September 1790, but in Vol. II says that both battles were fought in 1791. Grant Duff gives 1790 for Pātan, and 12th September 1791 for Merta, while Keene, on the authority of de Boigne, writes 10th September 1790. A tomb erected to the memory of a French captain of infantry at Merta has an inscription to the effect that he was wounded in Sindhia's service on the 11th September 1790, and died a week later.

and a body of his Pathāns thrice charged through the regular infantry of the Marāthās," and that de Boigne displayed great personal energy, and "to his gallantry and the discipline of his battalions was justly attributed the great victory which ensued." The army of Ismāil Beg was completely routed, all his guns were taken, and ten battalions of infantry grounded their arms and surrendered. The Mārwār chronicles, on the other hand, ascribe the defeat to the traitorous conduct of the Jaipur troops who, "on condition of keeping aloof during the fight, were to have their country secured from devastation. As usual, the Rāthors charged up to the muzzles of de Boigne's cannons, sweeping all before them, but, receiving no support, they were torn piecemeal by showers of grape and compelled to abandon the field."

The battle of Merta is thus described by Keene in his *Fall of the Mughal Empire*:—"De Boigne came up in the grey of the morning when the indolent Hindus were completely off their guard; and, when the Rājā and his companions were roused, they found the camp deserted and the army in confusion. Fifty field-pieces were piercing the lines with an incessant discharge of grape-shot, and Colonel Rohan who commanded de Boigne's right wing had, with unauthorised audacity, thrown himself into the midst of the camp at the head of three battalions. Rallying a strong body of horse—and the Rājput cavaliers were brave to a fault—the Rājā fell furiously upon the advanced corps of infantry, which he hoped to annihilate before they could be supported from the main army. But European discipline was too much for Eastern chivalry; it was the squares of Waterloo before the *gendarmerie* of Agincourt. The ground shook beneath the impetuous advance of the dust-cloud, sparkling with flashes of quivering steel; but when the cloud cleared off, there were still the hollow squares of infantry, like living bastions, dealing out lightnings far more terrible than any that they had encountered. The baffled horsemen wheeled furiously round on the Marāthā cavalry, and scattered them to the four corners of the field; they then attempted to gallop back, but it was through a valley of death. The whole of the regular troops of the enemy lined the way; the guns of de Boigne, rapidly served, pelted them with grape at point-blank distances; the squares maintained their incessant volleys and by nine in the morning nearly every man of the 4,000 who had charged with their prince lay dead upon the ground. Unfatigued and almost uninjured, the well-trained infantry of de Boigne now became assailants; the battalions rapidly deployed and, advancing with the support of their own artillery, made a general attack upon the Rājput line. By three in the afternoon all attempt at resistance had ceased, and the whole camp, with vast plunder and munitions of war, fell into the hands of the victors. The Rājput army is stated in the memoir of de Boigne to have mustered no less than thirty thousand horse, twenty thousand foot, and twenty-five guns." We learn from General de Boigne's own description of the battle that his battalions were only enabled to resist the furious charge of the Rāthor* horse by

* Grant Duff mentions this gallant band and gives its strength as only 400. Tod, however, says 4,000.

forming themselves into hollow squares—the formation to be rendered so famous in after-years at Quatre Bras and Mont St. Jean. Another graphic account of this battle will be found in Tod's *Rājasthān*, Volume I, from which we learn that Mahārājā Bijai Singh was not present, and that the leaders of the Rāthor horse were the chieftains of Awā, Asop, Rian, etc.

Bijai Singh died in 1793, having been, during the last years of his life, entirely under the influence of a mistress, whose insolence estranged the nobles and procured her own assassination. He introduced a coinage of his own (Bijai Shāhi), and the comparatively long spell of peace the State enjoyed in his time is commemorated in the local annals by the name *Bijai bāra* (the time of Bijai Singh). He left six sons, the eldest of whom was Zālim Singh, but a grandson, Bhīm Singh, seized the *gaddi* and held it against all comers.

Mahārājā Bhīm Singh, 1793-1803.

The latter's first act was to drive his uncle Zālim Singh, the son of a Mewār princess, out of Jodhpur and force him to seek shelter at Udaipur where, with an ample domain from the Rānā, he passed the rest of his days in literary pursuits. Zālim Singh, who was described as a man of great personal and mental qualifications, a gallant soldier, and no mean poet, died at Kāchbali* in the prime of life in 1799. Mahārājā Bhīm Singh next turned his attention to such others of his relatives as might be considered rivals; he put out the eyes of one uncle, Sher Singh, killed another, Sardār Singh, and arranged for the death of his cousin, Sūr Singh. There remained but one claimant, his young cousin Mān Singh, and he was safe within the strong walls of Jālor where, for nearly ten years, he repelled repeated assaults. In 1803, however, the lower portion of the town was taken, and the fall of the fortress and the capture of Mān Singh seemed imminent, when news suddenly arrived of Bhīm Singh's death.

Mahārājā Mān Singh, 1803-43.

Mān Singh was immediately proclaimed chief of Jodhpur, and at the commencement of the Marāthā war was offered by the British Government an alliance which would have secured to him his territories without the payment of any tribute. The terms had actually been drawn up by December 1803, but, instead of ratifying the treaty, Mān Singh proposed another and, as he had in the meantime given assistance to Holkar, the alliance was formally cancelled in May 1804, and the Mahārājā was left to his own resources. Troubles then came quickly upon Jodhpur owing to internal disputes regarding the succession of Dhonkal Singh, a supposed posthumous son of Bhīm Singh, and a disastrous war with Jaipur for the hand of the daughter of the Mahārānā of Udaipur, by name Krishna Kunwari, "the Helen of Rājasthān." In this war the Jaipur Chief, Jagat Singh, called in the aid of the freebooter, Amīr Khān, and Mān Singh was besieged in his capital. The town, little capable of defence, was soon taken and given up to unlicensed plunder, but the fort held out and, although the defences of the north-eastern angle were destroyed, the besiegers were no nearer their object and became

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* In the British District of Merwāra.

clamorous for pay. The protracted defence had exhausted the Jaipur treasury, and Mān Singh seized the opportunity of bribing Amīr Khān to come over to his side and attack and plunder Jaipur. This had the desired effect; Jagat Singh raised the siege in 1806 and, sending on in advance the spoils (including forty pieces of cannon) with his chieftains, offered the Marāthā leaders twelve lakhs of rupees to escort him safely to his capital, and secretly bribed Amīr Khān, the author of his disgrace, with a bond for nine lakhs more not to intercept his retreat. The Jaipur chieftains, conveying back the spoils of Jodhpur, were attacked on the joint frontier by the Thākurs of Kuchāwan, Ahor, Jālor and Nīmāj, who determined that no trophy of Rāthor degradation should be carried away by the Kachwāhas, and were defeated and dispersed, the entire booty, including the forty guns, being safely lodged at Kuchāwan.

Amīr Khān then returned to Jodhpur where he was received with distinguished honours, given an advance of three lakhs, and promised a large reward if he completely subdued the rebellious nobles who were still supporting the pretender, Dhonkal Singh. This he swore to accomplish, and he kept his word by treacherously massacring forty-two of them at Nāgaur in 1808, and sending the heads of the most distinguished of them to Mān Singh. In this way, the latter established himself, though the dissensions between him and his principal clansmen continued until his death. About this time, an expedition was planned against Bīkaner, the chief of which State had sided with Dhonkal Singh; an encounter took place at Bāpri in which the Bīkaner army lost two hundred men and then fell back on the capital, pursued by the victors who halted at Gajner. Here terms were arranged, namely the payment by Bīkaner of two lakhs and the surrender of the bone of contention, the town of Phalodi, which had been assigned to it as the price of joining the confederacy.

Amīr Khān was now the arbiter of Mārwār; he plundered Nāgaur and left a garrison there; he then repaired to Jodhpur where he received ten lakhs, two large towns, and Rs. 100 daily as table-money; and he subsequently partitioned the district of Merta among his followers, and placed troops at Nāwa, thus commanding the Sāmbhar lake. In 1814 he renewed his raids and, at the request of some of the chieftains, murdered Mān Singh's *Dīwān*, Indrāj, and his spiritual director, Deonāth, the latter of whom, while holding the keys of his master's conscience, had also been conveniently using them to unlock the treasury. This outrage so terrified the Mahārājā that he pretended insanity and, after abandoning all power to the Nāths (of which sect Deonāth had been the head), became a recluse. Amīr Khān remained in the country till 1817 when he withdrew after plundering the treasury, and Chhatar Singh, the only son of Mān Singh, assumed the regency.

With him the British Government opened negotiations at the outbreak of the Pindāri war, and a treaty was concluded in January 1818, by which the State was taken under protection and agreed to

pay an annual tribute of Rs. 1,08,000* and to furnish, when required, a contingent of †1,500 horse and the whole of its forces, except such portion as might be required for the internal administration of the country. Chhatar Singh died from the effects of dissipation shortly after the conclusion of the treaty, whereupon his father threw off the mask of insanity and resumed the government.

Strengthened in his position by British protection, Mān Singh, in the course of the next two years, put to death or imprisoned most of the nobles who, during his assumed imbecility, had shown any unfriendly feeling towards him, and many of the others fled from his tyranny and appealed for aid to the British Government, with the result that in 1824 the Mahārājā was obliged to restore the confiscated estates of some of them. In 1827 some of the nobles again rebelled and, putting the pretender, Dhonkal Singh, at their head, collected a considerable body of men in Jaipur territory and prepared to invade Jodhpur. Upon this, Mān Singh urged on the British Government that the time had arrived when he was entitled to the aid of their troops to support him on the *gaddi*, and that the attack by which he was threatened was not an internal insurrection but a foreign invasion emanating from and supported by Jaipur. The answer of Government was clear and decided. "If insurrection should be so general as to indicate the desire of chiefs and subjects for the downfall of the prince, there does not exist any reason for our forcing on the State of Jodhpur a sovereign whose conduct has totally deprived him of the support and allegiance of his people. Against unjust usurpation, or against wanton but too powerful rebellion, the princes of protected States may fairly perhaps call on us for assistance but not against universal disaffection and insurrection, caused by their own injustice, incapacity and misrule. Princes are expected to have the power of controlling their own subjects, and if they drive them into rebellion, they must take the consequences." At the same time, the Jaipur State was considered to have acted in breach of its engagements with Government by having allowed an armed confederacy to form against Jodhpur within its territory, and strong remonstrances were addressed to that Darbār; lastly, Dhonkal Singh was required to withdraw from the confederacy, and the nobles settled their differences among themselves.

In 1839 the misgovernment of Mān Singh, the ascendancy of the Nāths, and the consequent disaffection and insurrection reached such a pitch that the British Government was compelled to interfere. A force was marched to Jodhpur, of which it held military occupation for five months, when Mān Singh executed an engagement to ensure future good government. One of the articles runs thus:—"A British Agent having been appointed at this capital, tyranny or oppression

* Reduced in 1847 to Rs. 98,000 in consideration of the cession to Government of the fort and district of Umarkot—see footnote to page 68 *supra*.

† An obligation converted in 1835 to an annual payment of Rs. 1,15,000 towards the Jodhpur Legion, which was then raised. The Legion mutinied in 1857, and its place is now supplied by the 43rd (Erinpura) Regiment—see Part III, Chapter VI, of this volume.

shall not be suffered towards any person; no interference shall be exercised in regard to the six sects of religionists; and there shall be no destruction of life among the animals held sacred in Mārwār." This engagement was a personal one and ceased with Mān Singh's life on the 5th September 1843. He left no son, natural or adopted, and one Rānī, four concubines, and a slave girl were immolated on the pyre with him. By the choice of his widows and the nobles and officials of the State, confirmed by Government, Takht Singh, chief of Ahmadnagar, became Mahārājā of Jodhpur, the claims revived by Dhonkal Singh being set aside. This succession fulfilled Tod's declaration that "the race of Ajīt must utterly perish unless a scion from the uncontaminated stem of Idar be grafted upon it, and then it may revive."

Mān Singh was a man of remarkable patience, fortitude and constancy, but also of cruelty. In the school of adversity he learnt to master, or rather disguise, his passions, and, "though he showed not the ferocity of the tiger, he acquired the still more dangerous attribute of that animal, its cunning." He had so long acted the maniac that he had nearly become one. On the other hand, Mr. Wilder, after much personal communication with him in 1822, observed in his despatch to Government, "Rājā Mān Singh is undoubtedly a man of superior sense and understanding," while Captain Tod, who met him in 1819, found him dignified, courteous and well-read in history.

Mahārājā Takht Singh, 1843-73.

Under Mahārājā Takht Singh's rule, the affairs of Mārwār fell into the utmost confusion, and from the time of his accession to power he never relaxed his endeavours to resume the villages which his predecessor had been compelled to restore in 1839; but he was a loyal chief and did good service during the Mutiny, receiving in 1862 the usual *sanad* guaranteeing to him the right of adoption. Four years later, he agreed to cede lands for railway purposes, yielded to the British Government all rights therein short of those of sovereignty, and relinquished duty on goods passing through the State without breaking bulk; while in 1868 he concluded an extradition treaty with Government, which was subsequently modified by the agreement of 1887.

His unjust confiscations and exactions led to constant disputes with his nobles which terminated in 1868 in open hostilities between the parties. The principal Thākurs solicited the interference of the British Government who, while giving them to understand that such interference, if found necessary, would be carried out in a manner calculated to bear down all opposition, informed the Mahārājā that, unless he consented within a given period to be guided by the advice of the British authorities, he would be deprived of all power for the rest of his life. Under these circumstances Takht Singh signed an agreement, by which he appointed a ministry to conduct the affairs of the country and placed at its disposal fifteen lakhs of rupees for public expenditure; he also bound himself (i) to manage all the *khālsa* villages, and exercise the civil and criminal

jurisdiction therein, through the ministers; (ii) to restrict his private expenditure to a *certain sum; (iii) to abstain from interference* with the established jurisdiction *of his nobles; (iv)* to assign suitable allowances for the maintenance of his sons; and (v) to abide by the decision of Government in regard both to the *hukmnāma* or succession tax to be levied from the Thākurs generally and to the disputes between him and certain of their number.

In 1870 he leased to Government the Jodhpur portion of the salt-lake at Sāmbhar, but a few months later (October 1870), at Lord Mayo's *darbār* in Ajmer, there was an unfortunate dispute about precedence with the Mahārānā of Udaipur, and Takht Singh declined to attend. In vain did the Political Agent and his own son (Jaswant Singh) remonstrate with him, and, after waiting for about an hour, the Viceroy held the *darbār* without him. For this want of respect to Her Majesty's representative, he was directed to leave Ajmer at daybreak the following morning, the friendly ceremonies usual on such occasions were omitted, and it was eventually decided that his salute should be reduced by two guns. Lord Mayo showed his sense of the loyal feeling of the Mahārājā's son by receiving him in private audience after the *darbār*.

In 1872 Zorāwar Singh, the second son of Takht Singh, took possession of the town and fort of Nāgaur in the hopes of establishing by force of arms his claim to be considered heir to the *gaddi*, on the plea that his elder brother had been adopted to Ahmadnagar, and that he was the first son born to the Mahārājā after his accession to Jodhpur. The insurrection was put down without bloodshed, and Zorāwar Singh, whose claims were unsupported by the nobles and finally negatived by Government, was required to reside at Ajmer.

Mahārājā Jaswant Singh II, 1873-95.

Mahārājā Takht Singh died on the 12th February 1873, when he was succeeded by his eldest son, Jaswant Singh II, who was duly installed on the 8th March of the same year. A liberal provision was made by the latter for the numerous family left by his father; this was considered inadequate by some of the members, and attempts to excite disaffection were made by them, but these ceased on its being understood that opposition to the legitimate authority of the Mahārājā would be visited with the severe displeasure of the Supreme Government.

The new administration was distinguished by the vigour and success with which dacoities and crimes of violence, formerly very numerous, were suppressed. Up to 1883 the border districts were in a very disturbed state, and active measures were necessary to restore order and bring the lawless Thākurs and tribes to book. Thus were pacified: Jālor in the south in 1874 and again between 1879 and 1882, the outlawed Thākur Sārdūl Singh of Rewāra being executed in September 1882; Lohiāna in the south, also in 1882, the village, which for generations had resisted authority and been the chief resort of predatory Bhīls, being razed to the ground in the following year and replaced by one called Jaswantpura; Bardwa on the Jaipur border in 1882, a defiant village of Rājput robbers; and Boyātra and Sānkra in the west in 1883.

The year 1884 marks the termination of a period of internal disorder and the commencement of an epoch of political regeneration. The civil and criminal powers of the principal *jāgīrdārs* were regulated and defined; the courts throughout the State were re-organised; the system of farming out the land revenue was abolished; the village boundaries, as well as the borders of neighbouring States, were demarcated; a forest department was constituted; several important public works, including a large extension of the railway, were carried out; Government post offices were multiplied, and the Darbār became dependent on them instead of employing its own runners; the financial and customs' systems were remodelled, transit-duties being partially abolished in 1886 and entirely in 1891 (save on opium and intoxicating drugs); education received a great stimulus; vaccination spread; numerous dispensaries were built; and an admirable force of cavalry was raised for the defence of the Empire. In fact, in every department a wise and progressive policy was pursued.

No account of the events of the above period (1884—92) would be complete without mention of two officers to whom credit is due for the improvement in the administration above recorded, namely Colonel P. W. Powlett and Mahārāj Pratāp Singh*. The former's connection with Rājputāna began in 1868, and he was Political Agent, or Resident, of Jodhpur almost uninterruptedly from January 1880 to April 1892; his services earned the approbation of the Government of India, and were of the highest value to the people of Mārwār, among whom he is still affectionately remembered. Mahārāj Pratāp Singh was the brother of the ruling chief and, save for fourteen months—August 1881 to October 1882—the chief minister (*Musāhib Alā*) of the State; his personal energy and his naturally great influence with his clansmen contributed largely to the suppression of dacoity and other successful issues, and he is well known both in India and England as the popular Mahārājā of Idar (in the Bombay Presidency).

As for Mahārājā Jaswant Singh himself, no chief could have better upheld the character of his house for unswerving loyalty to Government, and the two fine regiments of Imperial Service cavalry raised by him between 1889 and 1893 are among the evidences of this honourable feeling. He was created a G. C. S. I. in 1875, and was invested by H. R. H. the Prince of Wales (now His Majesty King Edward VII) on the 1st January 1876, and his salute (ordinarily seventeen guns) was raised first to nineteen, and next to twenty-one guns. He died on the 11th October 1895, and his loss was widely mourned; he is remembered by all for his never-failing generosity, largeness of heart, and sympathy with all classes, and as one of the most loyal feudatories of the Crown, who not only recalled the best traditions of his house, but assimilated to them the liberal ideals and the strenuous energies of the system of British government.

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* Now Major-General His Highness Mahārājā Sir Pratāp Singh of Idar, A.D.-C. G.C.S.I., K.C.B.

Mahārājā Sardār Singh 1895 to date.

Jaswant Singh was succeeded by his only son, Sardār Singh, the present Mahārājā, who was born on the 11th February 1880 and was invested with ruling powers, subject to certain conditions, on the 18th February 1898. During his minority the administration was carried on by his uncle, Mahārāj Sir Pratāp Singh, assisted by a Council. The chief events of His Highness' rule have been: the employment of a regiment of his Imperial Service Lancers *(Sardār Risāla)* on the north-west frontier in 1897-98 and in China in 1900-01; the extension of the railway to the Sind border, and thence to Hyderābād; the great famine of 1899-1900; the conversion of the local into Imperial currency in 1900; and his visit to Europe in 1901, when he had the distinction of being the first Rājput chief to pay court to His Majesty the King and Emperor. Mahārājā Sardār Singh was a member of the Imperial Cadet Corps from January 1902 to August 1903, and subsequently resided for about two years at Pachmarhī, where his health, which had been indifferent, greatly improved; he has three sons, namely Sumer Singh, born on the 14th January 1898, Mūl Singh*, born on the 8th July 1903, and Ajīt Singh, born on the 1st May 1907.

In the Jodhpur coat-of-arms, the tinctures represent the country flag—the *pānchranga* or five-coloured; and the "canton dexter of the fourth, three ears of barley proper," records Sher Shāh's saying, after having nearly perished with his eighty thousand men in the waterless and thirst-compelling deserts of Mārwār, that he "had nearly lost the empire of Hindustān, for a handful of barley." The charge of the hawk represents the tutelary goddess, the winged *(pankhanī)* Devī or Durgā (also styled Manasā, Vindhyavasinī, and Rāshtrasenā), who in that form has appeared on several critical occasions to assist the founders of the State. Ever since Rao Jodha, nearly four hundred and fifty years ago, obeyed the mandate of an ascetic and left the old Parihār city of Mandor for the "hill† of birds" *(bhākar chiryā)*, the palaces of red sandstone have grown and thickened. It is therefore only seemly that the birds, who through the long sunlit hours unceasingly circle with outstretched pinions the topmost towers of the grim old fort, should find a place as supporters of the shield of Mārwār. The motto *Rana bankā Rāthor*, meaning "the Rāthor invincible" (or stubborn) "in battle," is taken from the old quatrain:—

No host so good as the Deora;
No donor so liberal as the Gaur;
In pride none equal the Hāra;
In arms none surpass the Rāthor.

Archæology.

The State is rich in antiquarian remains; the most interesting are to be found in the Bāli, Desuri, Dīdwāna, Jālor, Jaswantpura, Jodhpur, Mallāni, Nāgaur, and Pāli districts, and are described in Part II, Chapter XXII, of this volume.

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* Changed on the advice of astrologers to Umed Singh in 1905.

† The hill on which stands the fort of Jodhpur; it was also called *Chiryā tūk* because it was the favourite retreat of the hermit Chiryā Nāth.

CHAPTER III.

THE PEOPLE.

The first enumeration of the population took place in 1881 when the total number of inhabitants was returned at 1,757,618, or fifty to the square mile. The above figures were probably somewhat below the mark, as the operations being quite a novelty, were opposed by the people, especially the hill tribes, and were imperfectly understood by the staff employed. Census of 1881.

The next census was taken in 1891, and the population was ascertained to be 2,528,178, or seventy-two persons per square mile. The remarkable increase of 43·8 per cent. (as compared with twenty-one for Rājputāna and nine for the whole of India) was due partly to improved methods of enumeration but chiefly to the absence of famine, the opening up of the country to commerce by means of railways, and the introduction of a better system of Government. Census of 1891.

At the last census, taken on the 1st March 1901, the population was found to number only 1,935,565, or fifty-five persons to the square mile, and the decrease of 23·4 per cent. may be ascribed to a succession of indifferent, if not actually bad, seasons culminating in the terrible famine of 1899-1900 and an exceptionally virulent epidemic of malarial fever in the latter half of 1900. An examination of Table No. XX in Vol. III-B. will show that, with the exception of Sānkra, all the districts suffered, particularly Nāgaur, Bilāra, Merta, Jodhpur, Sānchor, Pachbhadra, Jaswantpura and Pāli, each of which lost at least one-fourth of its population during the decade. The extraordinary increase of 158 per cent. in Sānkra is said to be due to the immigration of Bhāti Rājputs and others from Jaisalmer, while the small decrease of 3·4 per cent. in Mārot in the north-east was the result of comparatively easier agricultural conditions during the ten years, especially in 1899; in Sāmbhar, where the decrease was 10·5 per cent., the famine was less severely felt and a large population is always supported by the salt-works. Of the four main religions, the Animists (*i.e.*, Bhīls and Girāsias) were the heaviest sufferers, losing two-fifths of their members, but Hindus lost nearly twenty-four, and Musalmāns and Jains each between seventeen and eighteen per cent. Census of 1901.

The number of persons per square mile has already been mentioned, namely 50 in *1881*, 72 in *1891*, and 55 in *1901*, but the figures for the different districts vary considerably. Thus at the last census, Bāli in the south-east and Mārot and Parbatsar in the north-east all supported more than one hundred persons per square mile, while at the other extreme was Sheo on the western border with only twelve. Density.

Towns and villages.

At the last census, the State contained 4,057 inhabited towns and villages, having altogether 447,087 occupied houses; the average number of houses per square mile was thus 12·8, ranging from 32 in the Jodhpur and 26 in the Bāli *hukūmat* to 4·4 in Phalodi and 2·6 in Sheo; the average number of persons per house was 4·3, as compared with 5 in *1891* and 4·5 in *1881*.

Towns.

Of the twenty-seven places treated as towns in 1901, six had a population of less than 5,000, thirteen between 5,000 and 10,000, seven* between 10,000 and 20,000 and the capital contained 60,437 inhabitants. The urban population numbered 256,694, or about thirteen per cent. of the total population of the State, and while the average number of persons per house was 4·5 (varying between 5·3 at Jodhpur city and Phalodi and 2·8 at Jaitāran), the average number of houses per town was 2,165.

Villages.

Of the 4,030 villages, 3,020, or nearly three-fourths, contained less than 500 inhabitants each, 678 had between 500 and 1,000, 244 between 1,000 and 2,000, 87 between 2,000 and 5,000, and one (Makrāna) contained 5,157 inhabitants and might preferably have been treated by the census authorities as a town. The rural population (1,678,871) occupied 389,724 houses, which figures give an average of 417 persons and 97 houses per village, and 4·3 persons (5·8 in Parbatsar and Shergarh and 2·2 in Jodhpur) per house. In the west, the villages often cover considerable areas as they include the *dhanis* or small farms which the agriculturists erect close to their fields so as to be near their work; again, the Bhīls and Girāsias of the hilly country in the south and south-east reside in *pāls* or collections of detached huts, like their brethren in the Udaipur State (see Vol. II-A, page 33); but elsewhere the villages are of the usual compact type, with the best houses in the centre or on an elevation and the menial quarter at one extremity or, in the case of a walled village, often outside.

Migration.

Of the total population enumerated in 1901, no less than 98·6 per cent. were born in the State, and another one per cent. in some other part of Rājputāna (chiefly Jaipur and Bikaner); the rest came mostly from the Bombay Presidency and the United Provinces. The extent to which Jodhpur has lost its population by migration is indicated by the following figures. While she received from other Rājputāna States 20,126 persons (12,973 of whom were females), she gave them 45,671 persons (28,047 females), so that her net loss was 25,545 persons, of whom nearly fifty-nine per cent. were females. The movement was greatest with Jaipur, but the gain and loss with this State were fairly equally divided, the actual loss to Jodhpur having been 460. The heaviest loss was to Sirohi, which State received 8,605 more persons (mostly women) than it gave. Similarly in transactions with other parts of India, emigration has been on a much larger scale than immigration; thus, while the emigrants

* Including Sāmbhar (population 10,873), which is under the joint jurisdiction of the Jodhpur and Jaipur Darbārs.

numbered at least 155,946,* the immigrants were only 5,748, or a net loss to Mārwār of 150,198 persons. The Bombay Presidency gained nearly 60,000 persons, Central India more than 34,000, Ajmer-Merwāra 28,000, and the Punjab 12,000. The statistics relating to birthplace show (i) that, in its intercourse with other States of Rājputāna and with Central India, Jodhpur sends out more females than males, and (ii) that in its dealings with other parts of India the reverse is the case. The excess of females over males emigrating to adjacent territories is largely due to the marriage customs of the Hindus which necessitate alliances with septs not represented in the State, while those who wander further afield (namely to the Punjab, United Provinces, Central Provinces, Bengal, Baroda, and even Madras and Mysore) are men who settle there either as traders or sepoys. For the rest, it is a well-known fact (i) that among the agricultural population of the western deserts emigration is an annual event, whatever be the nature of the season, as there is practically but one harvest, the *kharīf*, gathered in September or October, after which the people always leave in large numbers to find employment in Sind and elsewhere ; (ii) that the recent famines and scarcities caused more than the usual amount of emigration ; and (iii) that the traders known as Mārwārīs are famous for their enterprise and the important part they play in the commerce of the Empire, there being hardly a town where the thrifty denizen of the sands of western and northern Rājputāna has not found his way to fortune from the petty grocer's shop in a Deccan village to the most extensive banking and broking connection in the commercial capitals of both eastern and western India. Of the 2,111,255† persons returned in 1901 as having been born in Jodhpur, nearly 90½ per cent. were enumerated in the State itself, more than 2 per cent. in other Rājputāna States, more than 6½ per cent. in Provinces adjacent to Rājputāna, and 0·7 per cent. in other parts of the Indian Empire.

Vital statistics.

The registration of births and deaths was started at Jodhpur city in January 1894, but has not yet been attempted in any of the towns or districts. The statistics relating to deaths are believed to be fairly accurate, the necessary information being easily obtainable through the gate-keepers, but those dealing with births are of little value as they are based chiefly on the reports of *dhāis* or midwives, whose services are not requisitioned by all classes of the community. The people generally are reticent regarding their domestic occurrences, especially the birth of a daughter—an event still regarded as a family misfortune; but it is satisfactory to note that in each of the last four years births have exceeded deaths. During the period (1894-1905), for which returns are available, the yearly average number of births has been 2,107, or a rate of about thirty-four per mille, and of deaths

* A large number of persons enumerated outside the Province gave their birthplace as Rājputāna, without mentioning any particular State. Some must have been born in Jodhpur.

† This is the actual number returned ; there may have been more born in the State—see footnote above.

2,380, or a rate of thirty-nine per mille. In 1896 only 854 births were registered, and in 1905 as many as 3,332; similarly, 931 deaths were reported in 1897 and 8,363 in 1900. The actual figures for 1905 were 3,332 births, or a rate of fifty-five per mille, and 2,089 deaths, or a rate of thirty-four per mille; of the deaths more than half were ascribed to malarial fever, fifteen per cent. to dysentery or diarrhœa, and about eleven per cent. to respiratory affections.

Diseases.

The principal diseases are malarial fevers, especially common in the autumn, when the extremes of temperature are first experienced and the ground is rapidly drying after the rains, and skin affections, due either to the want of water for cleansing purposes or to bad water and indifferent food. Bronchitis and pneumonia are often prevalent in the cold months, in consequence of the insufficient clothing of the people, and dysentery and diarrhœa in the rainy season. Guinea-worm (including threadworm among children), dyspepsia, congestion of the liver, enlarged spleen, inguinal hernia, rheumatism, cataract, non-malignant and mycetomatous tumours, and venereal diseases are all fairly frequently met with. Of epidemics, smallpox, for which the most fatal months are March-June, was formerly very common, but the virulence of the disease has been much reduced during recent years by vaccination. Cholera is comparatively rare, especially in the western part of the State, but severe outbreaks occurred in 1887, 1892, 1896 and 1900. In the first of these years, 2,090 deaths were reported, chiefly from the capital and the districts of Bāli, Jālor, Pachbhadra, Sāmbhar and Sojat; in 1892 a considerable portion of the State was affected, and the deaths numbered 8,473; in 1896 the disease appeared at Nāwa on the Sāmbhar lake, spread to sixteen districts, and altogether claimed 2,327 victims; while between December 1899 and September 1900 nearly 8,000 deaths occurred.

Plague.

Bubonic plague (*mahāmārī* or *gānth-kī-mandagī*) is believed to have visited this State for the first time in July 1836, when it broke out at Pāli and spread thence to Jodhpur city, Sojat, and several other places, disappearing finally at the beginning of the hot weather of 1837. The fact that it first started among the Chhīpas or cloth-stampers led to the supposition that the germs were imported in silks from China. An interesting account of the outbreak and of the measures taken to combat it will be found in Hendley's *General Medical History of Rājputāna* (pages 148—69), and in Adams' *Western Rājputāna States*. As for the more recent epidemic which started in Bombay in 1896, it may be said that, excluding a few cases discovered at railway stations, Jodhpur remained free for nearly five years. The disease, however, appeared in an indigenous form at Bāli in February 1901, at the adjacent village of Sewāri in the following month, at Duthāriya in February 1902, and at Pīpār in April 1903; a few cases have also occurred at other places. Up to the end of March 1907, altogether 947 seizures and 695 deaths had been reported. With the object of keeping plague out of the State, a special staff is maintained at all the important railway stations and

is empowered to examine and, if deemed necessary, to keep under observation for ten* days any person who has come from an infected area. Moreover, whenever and wherever a suspicious case has occurred, it has been the custom to evacuate and disinfect, or even to burn down, the house concerned, and to remove the inmates to a segregation camp. The advantages of prompt evacuation are thoroughly recognised, and in the earlier outbreaks at Bāli and Sewāri, when voluntary inoculation was introduced, His Highness set an excellent example by himself submitting to the operation, with the result that practically all the inhabitants of these two villages (some 7,000 persons) save those who were sick or infirm, followed suit. In this connection it may be of interest to mention that of 6,820 persons inoculated, sixteen were subsequently attacked with plague and eight of them died.

Infirmities. The number of afflicted persons fell from 14,070 in *1891* to 3,010 in *1901*, or by more than seventy-eight per cent. At the earlier census, 12,700 blind persons, 836 insanes and 534 lepers were enumerated, while in 1901 there were 1,690 blind, 460 insane and 246 lepers, besides 614 † deaf-mutes. The decrease was mainly due to the effects of the famine of 1899-1900, and partly to more accurate enumeration, but the spread of vaccination and the greater popularity of the hospitals and dispensaries doubtless contributed in bringing about a diminution in the number of blind persons.

Sex. Of the total population at the last census, 1,015,531 persons, or nearly 52½ per cent., were males, and the returns show that males exceeded females in every district or divisional unit except at Jodhpur city; but the proportion of females to 1,000 males has risen from 806 in *1881* to 902 in *1891* and 907 in *1901*, and the similar figures for Jodhpur city were 894,951, and 1,012 respectively. Taking the population by religion, the percentage of females to males at the last enumeration was 86·5 among Animists, 89·4 among Hindus, 90 among Musalmāns, and nearly 107 among Jains, the last figure being due to many of the men having gone to other parts of India to carry on their business, leaving their families at home. Statistics relating to age are never very reliable but, taking them for what they may be worth, the proportion of females to 1,000 males for the different age-periods was 1,001 among children under five; 937 between five and ten; 867 between ten and fifteen; 857 between fifteen and twenty; 901 between twenty and forty; 921 between forty and sixty; and 872 after the age of sixty. The first of the above figures is satisfactory, and seems to show that female infanticide is a thing of the past, while the fourth and lowest figure indicates the critical child-bearing period in the life of women. Turning to some of the more important castes, we find that among several of them the gentler sex preponderates; for example, for every 1,000 males, the Bishnois had 1,341 females; the Mīnās 1,173; the Jain Oswāls 1,109; the Baoris 1,108; and

* Reduced to five days since November 1906.

† Number in 1891 not recorded.

the Swāmis 1,064; while the opposite extreme is found in the cases of the Agarwāl and Mahesrī Mahājans who had respectively only 487 and 494 females to 1,000 males.

Civil condition.

At the last census, about 39 per cent. of the people were returned as unmarried, nearly 45½ as married, and more than 15 per cent. as widowed. Of the males, about 46 per cent., and of the females only 31½ per cent. were single. There were altogether 1,103 married females to 1,000 married males, and 1,321 widows to 1,000 widowers. The relatively low proportion of spinsters and the high proportion of widows are the results of the custom of early marriage among many castes and of enforced widowhood among all the higher sections, while the excess of wives over husbands is due partly to polygamy among the wealthier members of the Hindu and Musalmān communities and among the Bhīls, partly to the prevalence among most of the lower castes of *karewa* or the marriage of a woman with her deceased husband's younger brother, and partly to the fact that in adverse seasons males emigrate more freely than females. Taking the population by religions, it is found that, among the males, about 48 per cent. of the Musalmāns and Animists, nearly 52 per cent. of the Jains, and more than 54½ per cent. of the Hindus were married or widowed, and that, among the females, the similar percentages were Musalmāns 59, Jains nearly 65, Animists 69, and Hindus about 69½. Marriage is strictly obligatory on all women by religion, though among the Jains some take a vow of celibacy, but among male adults there are not a few who prefer a life of bachelorhood.

Early marriages are common, but do not necessarily mean the commencement of conjugal relations. Thus, of all children under fifteen years of age, more than one-sixth were married or widowed, the percentages for the different religions being Musalmāns 15·3, Jains 17, Hindus 18·8, and Animists 21·4; again, of girls under fifteen, more than 22½ per cent. were wives or widows, namely Musalmāns 14·5, Jains 19, Hindus 23·4, and Animists 32·3. These figures, which have been taken from the last census returns, show that early marriages are most prevalent among the Animists, but a mistake appears to have been made, for it is well known that the reverse is the case, and that the Bhīls who form the bulk of the Animistic population seldom marry their daughters before they are fifteen or sixteen and frequently not until they are eighteen or twenty. Divorce is allowed by Muhammadan law and among the Bhīls and lower castes of the Hindus, but is not often resorted to, while polyandry is quite unknown.

Language.

The language spoken by more than 96½ per cent. of the people is Mārwārī; another 1¾ per cent. speak Jaipurī, and a further 1·16 per cent. Sindī. Mārwārī is by far the most important of the four main groups of Rājasthānī, whether we consider the size of the area in which it is the vernacular, the number of its speakers, or the extent to which it has spread over India. It has many varieties, of which the best known are the Thalī or western Mārwārī of the desert, the Mewārī of the Udaipur State, the Bāgrī of north-east Bikaner

(often considered a distinct dialect), and the Shekhāwatī of north-west Jaipur. At the last census, Mārwārī in one or other of its forms was returned as the language of more than five million persons residing all over India. Jaipurī is another of the four chief groups of Rājasthānī, while the dialect of Sindī spoken in the western portion of Jodhpur is called Tharelī.

Castes, tribes etc.

Of castes and tribes found in the State, the following were the most numerous at the last census:—Jāts (219,539); Brāhmans (191,935); Rājputs (180,883); Mahājans (171,052); Balais (141,947); Rebāris (66,809); Mālis (55,233); Chākars (55,111); Kumhārs (50,799); Bhīls (37,697); Bishnois (37,273); and Sīrvis (31,102).

Jāts.

The Jāts form more than one ninth of the entire population and are found in every district of the State, but are most numerous in the Jodhpur, Mallāni, Merta, Nāgaur and Parbatsar *hukūmats*. They are believed to be of Indo-Scythian stock, and have been identified with the *Zanthii* of Strabo and the *Jatii* of Pliny and Ptolemy. Three main divisions are recognised, namely (1) the *aslī* or pure Jāts, claiming no Rājput ancestry but supposed to be descended from the hair *(jat)* of the god Siva, and comprising two endogamous sections, Godāra and Pūniya, so called after the names of their founders; (ii) the joint Jāt-Rājput stock; and (iii) the *anjna* or those of inferior social rank. The last two divisions used to intermarry but do not now do so. The Jāts are strong and hard-working, and the best cultivators in the State, famed for their diligence in improving the land. According to the saying "*Jāt jahān thāt*", a village inhabited by them is always expected to be flourishing, and they are assisted in the fields by their women and children:—"The Jāt's baby has a plough-handle for a plaything." They are usually vegetarians, but have no decided objection to a meat diet; by religion they are Vaishnavas, worship the plough and the cow, and are served by Chenniyāt Brāhmans. Socially they stand at the head of the widow-marrying castes; polygamy is allowed, but a man may not marry his wife's sister while his wife is still alive; early marriages are regarded with favour, though the general custom is of adult marriage; and divorce is permitted, an announcement in the presence of the caste members being deemed sufficient, but is seldom resorted to. An endogamous *panth* or sect, known as Jasnāthi after its founder, Jasnāth, who lived about 1488, is found chiefly in Pānchla, a village of the Nāgaur district; the members can be distinguished by their yellow head-dress, the black cord round their neck, and their practice of burying their dead instead of burning them. Another small sect is that of the Satnāmis or devotees of truth who by their distinctive profession of veracity seem to imply that they have the exclusive monopoly of this ancient virtue. Most of the Jāts wear round the neck a silver charm depicting Tejājī on horseback with his sword drawn and a snake biting him on the tongue. Tejā* was a Jāt of Karnāl in Nāgaur who, after a fight with the cattle-lifting Mers, died

* For a further account of this popular hero, see Vol. I-A. of this series, page 34.

from the bite of a snake; he is held in such reverence that the Jāts believe that if a man bitten by a snake tie a cord round his right foot and repeat the name Tejājī, he will assuredly recover.

Brāhmans.

The Brāhmans form nearly ten per cent. of the population, are found throughout the State and are numerically strongest in the Jodhpur, Jālor, Merta and Nāgaur districts. They stand first on the list of social precedence, and the principal divisions represented in Mārwār are the Srīmālis, the Sānchoras, the Pushkarnas, the Nandwāna Bohrās, the Chenniyāts, the Purohits, and the Pāliwāls.

Of these, the Srīmālis are the highest in rank; they are said to have come from Gujarāt, and take their name from the town of Srīmāl, now called Bhīnmāl, in the Jaswantpura district. They comprise two main groups (*āmnāyas*), Mārwārī and Mewārī—the former being hypergamous (*i.e.* taking, but not giving, daughters in marriage) in relation to the latter—and fourteen exogamous septs or *gotras*, each having one deity or *kuladevī*. The Srīmālis are mostly followers of Siva; they observe *pardā*, may take from other castes only pure milk, confectionery or water brought in *tumbīs* (gourds), or in their own *lotās* (metal pots), and in the absence of an heir may adopt the son of a daughter. By occupation they are priests, beggars, and traders and money-lenders on a small scale; they are so fond of begging that some years ago one of them on being made a *Hākim* (District officer) in this State could not help enquiring if his *petiyā* or daily allowance of food was inserted in the order of his appointment.

The Sānchoras take their name from the Sānchor district in the south, and are found chiefly in Mallāni; they consist of seven *gotras*, belong to the Vallabhāchārya sect, and are of almost the same status as the Srīmālis, being very strict in the matter of food and water; they also have the reputation of being expert cooks.

The Pushkarnas are said to get their name from the lake of Pushkar near Ajmer, but this tradition is not generally accepted in Mārwār. They have the same fourteen *gotras* as the Srīmālis and eighty-four exogamous clans, some being hypergamous, of which the most notable are (i) the Byās, which supplies priests to the Jodhpur ruling family; (ii) Kallā; (iii) Bohrā; (iv) Purohit, some members of which are astrologers and are called Joshīs—the Chandwāna Joshīs, or descendants of Chandu, being the most famous,—while others styled Ojhās are considered to be of a slightly inferior status from being exclusively priests by profession; and (v) Upādhya, a small section of which, having accepted service as pigeon-keepers to the Mahārājā, has lost caste. The Pushkarnas generally are tall and athletic, and wear beards; they mostly follow agriculture, but many of those who live in towns are in the service of the State. All their marriages usually take place on one and the same day in the year, and, on the death of even remote kinsmen, they become *bhadra*, *i.e.* go into mourning with face and head clean-shaved, excepting the scalp-lock.

The Nandwāna Bohrās, like the Srīmālis and Pushkarnas, belong to the Gurjara (Gūjar) division of the Panch Drāvida Brāhmans, but

some of them, known as Singhīs, are outcastes, owing to conversion to Jainism.

The Chenniyāts comprise six endogamous septs of the Panch Gaur Brāhmans, fused with but partial success into one community by Mahārājā Sawai Jai Singh of Jaipur in the early part of the eighteenth century in commemoration of his *aswamedha* or horse-sacrifice ; they can eat together, but do not intermarry. The six divisions are (i) the Dāimas or Dādhīchas, a cultured class whose original seat was at Manglod in Nāgaur ; (ii) the Gūjar Gaurs, reputed descendants of Gautama Rishī and slightly inferior in status to the Dāimas in consequence of their having formerly been priests to the Ahīrs, etc. ; (iii) the Pārīkhs, some of whom are priests to the Kaimkhānis, while others are cultivators or temple servants ; (iv) the Khandelwāls, who are said to have come from Khandela in Jaipur and are mostly agriculturists ; (v) the Sārsuts, who are called after Saraswatī, the Hindu Minerva, and whose ancestors are supposed to have accompanied Rao Siāhjī from Kanauj ; they live on charity or cultivate the land, but the majority are in private service ; they are not very strict in their observance of caste rules, eating and smoking with Baniās, Khattrīs and Kāyasths ; and (vi) the Gaurs, who are not very numerous and have been excluded from the Chenniyāt community of Mārwār during the last sixty or seventy years in consequence of their having intermarried with the Sikawāla Brāhmans of Jaipur. Of the above six septs, the Pārīkhs, Khandelwāls and Sārsuts may be considered second-grade, and the Gaurs third-grade Brāhmans.

The Purohits or Rājgurs are numerically stronger than any of the other main divisions of Brāhmans; they hold extensive tracts of land on the *sāsan* tenure, and are hereditary priests and match-makers to the Rājputs, from whom (as well as from Baniās) they take food. They do not beg, but accept without murmur what is offered to them in charity ; they till their own lands, being assisted by their womenfolk, and the wearing of the sacred thread and the shaving of the head and face as a sign of mourning are alike optional with them. A section known as Nātrāyat has lost caste from having recognised *nātra* or widow marriage.

The Pāliwāls take their name from the town of Pāli which they held in grant from the Parihār chiefs of Mandor before the establishment of Rāthor power in Mārwār. They do not observe the festival of Rākhi on the full moon of the month of Sāwan (July-August) because their ancestors are said to have been killed in large numbers by Muhammad Ghorī on that day, and they worship, among other things, the bridle of a horse on the Dasahra, probably in memory of their former state when they were chiefly robbers conducting their excursions on horseback. At the present time they are either cultivators or money-lenders, and take large sums of money on the occasion of their daughters' marriages, especially when the bridegroom is young or a widower.

Rājputs.

The Rājputs form more than one-eleventh of the population, but 7,788 of them, or about four per cent., are Musalmāns, found chiefly

in Mallāni, Nāgaur, Sānchor and Sheo; they, however, scarcely differ in their customs and manners from the Hindus. The Rājputs proper thus number 173,095, and are the fighting, land-owning and ruling caste, of Indo-Aryan origin—fine brave men, proud of their warlike reputation and their ancestry, and very punctilious on points of etiquette. The custom of costly infant marriages among them is happily becoming less common under the influence of the Sabhā or committee, organised by and named after the late Colonel Walter in 1888, which has fixed the minimum age of marriage at eighteen for a boy and fourteen for a girl, and regulates the expenditure by the income of the bride's father. The Rājputs are addicted to opium and liquor, accept food from almost any clean caste, and worship Mātājī, the shield, the sword, the dagger and the horse. Usually they are either *jāgīrdārs* or *bhūmiās*, but many are landless and have rather dropped behind in the modern struggle for existence in consequence of their rooted aversion to any pursuit other than that of arms or government. The *jāgīrdārs* follow the rule of primogeniture, and the *bhūmiās* that of gavelkind. The dominion over land being a criterion of superiority, hypergamy exists to a limited extent, though the tradition of common ancestry makes the entire tribe one vast endogamous group.

As is well known, there are three great divisions of Rājputs, namely, the Sūrajbansi or Solar race, the Chandrabansi or Lunar race, and the Agniculas or Fire tribes; and representatives of each are to be found in Mārwār. In the Solar group are the Rāthors, the Kachwāhas and the Sesodias, and in the Lunar the Bhātis, while all four of the Fire tribes,—the Chauhāns, the Ponwārs, the Parihārs and the Solankis—are met with. The Rāthor clan of course takes the first place from every point of view; it comprises more than one hundred septs, the chief of which are Mertia, Jodha, Udāwat, Champāwat, Kumpāwat, Karnot, Jetāwat and Karamsot. The chief septs of the Kachwāhas found here are Shekhāwat, Narūka and Rājāwat; of the Sesodias Rānāwat, Chondāwat, Shaktāwat and Ahāriya; of the Bhātis Jaisu and Raolot; of the Chauhāns Deora, Hāra, Sonigara, Nādol, Pūrbia and Sānchora; of the Ponwārs Sodha, Sānkla and Bhāyal; and of the Parihārs Enda.

Mahājans. The Mahājans or Baniās form nearly nine per cent. of the total population, and are numerically strongest in the districts of Bāli, Desuri, Jālor, Mallāni, Nāgaur and Sojat; nearly four-fifths of them are Jains. The Hindu Vaisyas occupy a slightly higher position in the social scale than the Jain, as among them adult marriages and the use of certain vegetables regarded as unclean or of food prepared by non-Brāhman castes are forbidden. The principal divisions found here are Oswāl, Mahesrī, Porwāl, Sarāogī and Agarwāl.

The Oswāls are by far the most numerous (107,926), and more than 98 per cent. of them are Jains. They are said to be the descendants of a number of Rājputs of different clans who were converted to Jainism in the second century, and they take their name from the town of Osi or Osiān, the ruins of which are to be found

about thirty miles north of Jodhpur city. The Oswāls are mostly traders and money-lenders, but some are in the service of the Darbār and others are *Kāmdārs* or managers of *jāgīr* estates; their chief septs are Mohnot, Bhandāri, Singhī, Lodhā (with four sub-divisions, one of which is named after Akbar's finance minister, Todar Mal), and Mohtā (of whom the Bhandsālis were originally Bhāti Rājputs, and are regarded as the *chaudhris* or headmen of the Oswāls).

The Mahesrīs number 20,288 and are all Hindus; like the Oswāls, they trace descent from Rājputs, chiefly of the Chauhān, Parihār and Solanki clans. The name is derived from Mahādeo or Mahesh in whom they believe. They comprise seventy-two exogamous sections, abstain from the use of liquor and meat, and will not touch onions, garlic or carrots; by occupation they are traders, contractors and bankers, some having agencies in the remotest parts of India.

The Porwāls (15,990) are said to have been originally Rājputs of Pātan in Gujarāt, where they embraced Jainism some seven hundred years ago. According to some authorities, they take their name from Pur, an ancient town in the Bhīlwāra *zila* of the Udaipur State. They eat but do not marry with the Oswāls, and are found principally as traders in the Bāli and Desuri districts where they lend money to the cultivators at exorbitant rates of interest and are consequently seldom repaid in full. Another noteworthy fact in connection with them is that they consider a daughter a valuable commodity and usually demand a very high price when giving her in marriage.

The Sarāogīs (13,195) are, like the Porwāls, all Jains; they comprise eighty-four sections. The word is said to mean one who abhors liquor, but, according to others, is a corruption of *shrāvaka*, a lay worshipper of Buddha or a Jain. The Sarāogīs are very strict in their observances, and carry the reverence for animal life to an extreme. They neither eat nor marry with the Oswāls, nor engage Brāhmans to officiate at their weddings, but are served by priests of their own caste. Further, they forbid the use of ivory bracelets by their women, bathe before breakfast, take their evening meal before sunset, burn no fuel without first washing it, and do not use lamps at night for fear of injury to insects.

The Agarwāls (11,033) all returned themselves as Hindus; they trace their origin to a Rājā Agar Sen whose capital was at Agroha in the Punjab. The story runs that Agar Sen had seventeen sons, and, being desirous of marrying them to the eighteen snake-daughters of a Rājā named Basak, another son was formed from the body of the eldest, and thus the couples were united; hence the Agarwāls are divided into 17½ clans, the half section eating but not marrying with the others, while another section, known as the Nārnaul Singhīs, forms the *mutsaddī* or official class. The rest are engaged in trade, and many of them are very enterprising, being found in almost all the cantonments and distant places under the name of Mārwārīs.

The Balais or Bhāmbis form rather more than seven per cent. of the entire population, and are found everywhere; they are Balais.

also called Meghwāls or descendants of Megh, who is supposed to have been a Brāhman. They are among the very lowest castes, and are workers in leather, village drudges and to a small extent agriculturists; those who remove the carcases of dead animals from villages or towns are called Dheds. Four main divisions exist, namely *(i) Adu* or original, *(ii)* Māru, *(iii)* Jāta, and *(iv)* Chārania,—the last three being composed of descendants of Rājputs, Jāts and Chārans, respectively; the two first divisions intermarry, but the two last are endogamous. Among the women, the Mārus wear ivory, and the Jātas lac bracelets, while the Chāranias dress like the Chāran females in yellow clothes. The Bhāmbis are Vaishnavas, and those who worship Rāmdeojī are called Bhagwāns from their peculiar red ochre coloured head-dress; they hold the *tulsi* plant *(Ocimum sanctum)* sacred, but eat the flesh of cows and other animals except pigs. Polygamy is allowed, but a man cannot marry two sisters nor even his deceased wife's sister. The dead are burned except among the followers of Rāmdeojī or Pābu (a local deity), who always practise inhumation.

Rebāris. The Rebāris, also called Rāikās in Mārwār, form nearly $3\frac{1}{2}$ per cent. of the population, and are properly breeders of camels; they assert that their ancestor was brought into existence by Mahādeo in order to take care of the first camel which had just been created by Pārbatī for her amusement. They have two main divisions, Māru and Chālkiā; the former deals only in camels, and occupies a superior position in that its members can marry the daughters of the Chālkiās without giving their own in return. The Chālkiās keep large herds of sheep and goats, and are numerous in Bāli and Desuri where they are known as Pītalias from their women generally wearing brass ornaments. Among the Rebāris, the Sāmarias, or descendants of Sāmar, alone claim pure extraction, while the others comprise a combination of several Rājput tribes, such as the section known as Parihār which has five subdivisions named after the sons of Nāhar Rao, the Rājā of Mandor.

Mālis. The Mālis form nearly three per cent. of the population; those living in the vicinity of towns are market-gardeners, and the rest are agriculturists. They comprise two intermarrying classes—the *Mor* (original) Mālis, of whom less than half a dozen families now exist, and the Māli Rājputs, the descendants, it is said, of certain Rājputs who had been imprisoned by Muhammad Ghorī and who, on obtaining their release through the good offices of one of the emperor's gardeners, by name Bāba, adopted the profession of gardening. Widow marriage is allowed, but not with the deceased husband's brother, and the fee paid by the new husband is always made over to the widow's parents. Persons dying unmarried are sometimes buried, but in all other cases the corpses are burnt.

Chākars. The Chākars or Golās are the illegitimate offspring of Rājputs on whom they attend as hereditary servants; those who are connected with the ruling family are considered to be of a status somewhat superior to the others. They eat the leavings of Rājputs only,

and of no other caste; no caste higher than that of the Oswāls will accept food cooked by them, and none lower than that of the Nais may offer food to them. The females are termed Golīs, are chiefly employed as maid-servants, and, as Tod has remarked, are "the great cause of loss of liberty." They are often admitted into the *zanāna* as concubines by the Rājput nobles and chiefs, who pay a large sum of money to their parents or husbands, and are then called *pardāyats*, the word "Raijī" being generally attached to their original name. Subsequently, if promoted to be *pāsbāns*, they take their seats just below the Rānīs. In Jodhpur city, the temple of Kūnj Bihārijī, the tank known as Gulāb Sāgar, and the Gīrd Kot were all constructed by or in memory of a famous *pāsbān* called Gulāb Raijī.

The Kumhārs form more than 2½ per cent. of the population, and are potters, brick burners, village servants and agriculturists; the word is said to be derived from the Sanskrit *kumbhakāra*, a maker of water jars. Their social standing is low, but they are a useful class and, as the proverb tells us, an object of solicitude to the superstitious traveller:—"If you go out without breakfast, always keep a Kumhār, a screech-owl, a monkey and a deer on your right." The caste in Mārwār consists of the following seven groups, the first six of which are Hindus and the last Muhammadan, while each is divided into a number of exogamous sections. The Khetīrs occupy the highest position and do not marry with the others; they are exempted from every kind of forced labour, are almost entirely agriculturists, keep bullocks instead of donkeys like their brethren, and their women are allowed to wear silver ornaments. The Bāndās are mere potters, whose women wear ivory bangles; they do not intermarry with the Jatiās, Pūrbias or Mewārās, but can take the daughters of the Mārus without giving their own in return. The Mārus, besides making earthen vessels, keep lime-kilns and are known as Chūngars in that capacity; they do not light the fire in their furnaces with their own hands but employ Bhangīs or sweepers for this purpose. The Jaliās cultivate land, carry grain and grass from one village to another on their donkeys, and prepare ropes and twine from the hair *(jat)* of goats and sheep. The Pūrbias are said to have come from the United Provinces and to be vegetarians; they generally gain a livelihood by selling grass and wood, but they also make earthen toys, and cultivate to a small extent. The Mewārās are masons and make millstones, and their females can only wear brass ornaments. Lastly come the Moilās who, as already stated, are Musalmāns, and claim to have originally been Samā Rājputs in Sind; they are potters and agriculturists, and in their religious customs practically Hindus. The Kumhārs eat with the Jāts and other clean Sūdras, but Brāhmans will take no water from the *lotās* of the Pūrbias; they worship the potter's wheel, call in the Srīmāli Brāhmans as priests at marriages, but not at deaths, and in the case of widow marriages pay the fee to the relatives of the deceased husband. The Bāndās and Pūrbias observe the custom of keeping a would-be son-in-law as a *ghar jamāi* to work for some time as an apprentice.

Kumhārs.

N

Bhīls. For an account of the Bhīls reference is invited to Part V of Volume II-A of this series. In Mārwār they are found in every district, except Mārot, Nāwa and Sāmbhar, but are most numerous in Mallāni, Jaswantpura, Sānchor and Jālor; they belong almost entirely to the village watchman and cultivating classes, and are divided into about sixty exogamous septs, some of which claim to be the original or unmixed stock, while others take their names from Rājput clans. Each sept has a recognised headman, and the decisions of *panchyats* in the settlement of disputes are usually obeyed. The Bhīls settled on *khālsa* lands have occupancy rights, but as cultivators are idle and thriftless. The women are not allowed to wear silver ornaments, but deck themselves with lac bangles, brass anklets and beaded necklaces; the favourite ornaments of the men are ear-rings, and charms and amulets on the right fore-arm. Marriage usually takes place within certain groups or geographical limits, and the Bhīl frequently has two wives, who may be sisters.

Bishnois. The Bishnois, though they form less than 2 per cent. of the population, are interesting from the fact that, so far as Rājputāna is concerned, they are found in four States only, namely Jodhpur, Bīkaner, Jaisalmer and Udaipur. They were originally Jāts, and derive their present name from their creed of twenty-nine (*bis+nau*) articles which they embraced at the instance of a Ponwār Rājput ascetic named Jāmbhā towards the end of the fifteenth century. These twenty-nine articles are as follows:—(i) and (ii) relate to the purification of women and are very similar to the rules laid down in the Levitical law; (iii) from the time that a child begins to eat grain, it should be bathed daily in water; (iv) be faithful always to one woman; (v) be content with whatever you may possess; (vi) salute one another five times a day; (vii) pray to the deity every evening; (viii) before partaking of food, pour *ghī* on the fire; (ix) filter all water used for drinking or bathing; (x) never speak without consideration; (xi) carefully examine all fuel to see that no insect or other living thing is in it; (xii) never give way to anger; (xiii) nor steal; (xiv) nor speak evil of any one; (xv) nor tell an untruth; (xvi) fast on the fifteenth of the dark half of each month; (xvii) always call on the name of Vishnu; (xviii) never take life nor, as far as possible, permit others to do so; (xix) never cut a green tree; (xx) eat only such food as is cooked by those of the sect; (xxi) fix a mark on the ear of every goat and sheep so that its life may be safe, and, as far as possible, make others do the same; (xxii) never castrate a bullock; (xxiii) nor eat opium; (xxiv) nor drink spirituous liquor; (xxv) nor consume *bhang*; (xxvi) nor smoke; (xxvii) nor let indigo touch the body; (xxviii) nor bear enmity to another; and lastly (xxix) so live as to be always prepared for death.

The Muhammadans were in power at Nāgaur at this time and, not approving of Jāmbhā starting a new religion, told him to include some of their tenets in it. He agreed and added the following clauses:—(*a*) All Bishnois to be buried after death; (*b*) after calling

on the name of Vishnu, the words *Allāh Bismillāh* to be repeated; (*c*) at marriage ceremonies the *phera* or circumambulation of the fire to be omitted, and when half the ceremony is over, the priest, who has till then been reading from Hindī books, to read from Muhammadan ones; (*d*) the top of the head to be shaved; and (*e*) the hairs of the beard not to be separated.

All these precepts are not now followed, but the Bishnois certainly form a distinct endogamous caste, comprising almost as many exogamous sections as there are among the Jāts generally, from whom they are distinguished by the discardment of the scalp-lock and the interment of the dead—sometimes in a sitting posture like the Sanyāsis, and almost invariably at the threshold of the house or in the adjoining cattle-shed. Further, they are strict vegetarians, teetotalers and non-smokers, partial to woollen garments as being at all times pure; they take neither food nor water from any other caste whatever, and they have their own special priests. Their chief occupation is agriculture, but they also keep large herds of camels.

At the last census the Sīrvis were found only in Jodhpur and Sirohi, and more than ninety-eight per cent. of them were enumerated in the former State, chiefly in the Bāli, Desuri and Jaitāran districts. The name is said to be derived from the Rāngrī word *sīr*, meaning cultivation, and the Sīrvis form the chief class of minor agriculturists. They have two endogamous and non-interdining groups (each divided into a number of exogamous sections), namely the Khārdia, the members of which eat flesh, drink wine and bury their dead, and the Janewā, in which the use of meat and liquor is forbidden and the dead are always burnt. Most of the Khārdias wear a thread round their wrist, bound on by the *Dīwān* or spiritual head of the community (whose headquarters are at Bilāra) to signify their consecration to Mātājī, and those who have not been thus consecrated may be burnt after death. The Sīrvis take food from no other caste, employ Joshīs at their marriages but not at funerals, and their widows are allowed to remarry. Sīrvis.

The only other castes exceeding 25,000 are the Khātis or carpenters, some of whom work as blacksmiths (Khāti-lohārs); and the Nais, who besides being barbers, play an important part in social matters as match-makers to the lower classes. The three main groups of the Nais are the Māru, the Baid and the Pūrbia, and of these the second is inferior as the men are the leeches and the women the midwives of the village.

Classifying the population according to religions, we find that in 1901 nearly eighty-three per cent. were Hindus, $7\frac{3}{4}$ per cent. Musalmāns, seven per cent. Jains and rather more than two per cent. Animists, while Christians numbered 224, Brahmos 122, Aryās 61, Pārsīs 55, Sikhs 7, and Jews 3. Religions.

No attempt was made at the last census to record the numerous sects of the Hindus, but it is believed that of the three main groups—Vaishnavas, Saivas and Sāktas—the first is most, and the second least numerous in Mārwār. Of independent sects more or less peculiar Hindus.

to this State and to Bīkaner, two have already (page 83) been mentioned among the Jāts, namely the Jasnáthi and the Satnāmi; and the creed of the Bishnois is described at pages 90-91 *supra*. A fourth sect is that of the Dādūpanthis, found chiefly in Jaipur but to a small extent here and in some other States of Rājputāna. A detailed account will be given in Vol. IV-A., because the head-quarters of the sect are at Nāraina in Jaipur territory, and it will suffice here to state that the Dādūpanthis are the followers of Dādū, a Nāgar Brāhman who was born in 1544 and died in 1603, and that their chief tenets are the equality of all men, strict vegetarianism and teetotalism, and lifelong celibacy. The sect comprises two sub-divisions, namely the Viraktas or ascetics and the Sādhus or Swāmis, *i.e.* celibates, and the latter are not entirely cut off from temporal affairs, several of them being money-lenders and very strict with their debtors. Jodhpur possesses a third subdivision called Gharbāri, but, as its members marry, they command much less respect than the others, and in Jaipur are not recognised as true Dādūpanthis.

Musalmāns. Of the 149,419 Musalmāns, more than 92½ per cent. were Sunnīs, more than four per cent. Shiahs, and the rest Wahābis. The Shiahs are mostly the Bohrā and Khojā traders from the Bombay Presidency and a few Mughal immigrants from upper India. The Musalmāns of Mārwār, speaking generally, retain their ancient Hindu customs and ideas, especially outside the large towns, and command the services of Hindu as well as Muhammadan priests; but in towns where they are numerically strong they have begun to observe certain religious rites in exclusively Islamite fashion.

Jains. The Jain sects are the ancient divisions of the Digambaras, whose images are unclothed, whose ascetics go naked, and who assert that woman cannot attain salvation, and the Swetāmbaras, who hold the opposite view regarding women, and whose images are clothed in white. An offshoot from the latter, known as Dhūndia, carries to an extreme the doctrine of the preservation of animal life, and worships *gurūs* instead of idols. Of the 137,393 Jains enumerated in 1901, nearly sixty per cent. were Swetāmbaras and twenty-two per cent. Dhūndias.

Animists. The Animists number 42,235 and are either Bhīls or Girāsias; the majority live near and are in contact with the villagers of the plains, and their religion is hardly distinguishable from the lower forms of Hinduism.

Christians. The Christian community has remained practically stationary, having numbered 207 in *1881*, 210 in *1891*, and 224 in *1901*. In the year last mentioned, 111 were Natives, 58 Europeans and 55 Eurasians, and of the Native Christians, forty-four were Presbyterians, twenty-eight Roman Catholics, and twenty-seven belonged to the Church of England. The United Free Church of Scotland Mission has had a branch at Jodhpur city since 1885, and maintains a small school for girls and a hospital. The State is included in the Anglican see of the Bishop of Nāgpur and the Roman Catholic Prefecture of Rājputāna; the latter was established in 1891-92, and is administered by the

Capuchin Fathers of Paris, the Prefect Apostolic having his head-quarters at Agra.

Occupations.

At the last census more than 58¼ per cent. of the people returned some form of agriculture as their principal means of subsistence; thus 52·6 per cent. were either landlords or tenants, 5·3 per cent. field-labourers, and about 0·3 per cent. growers of fruits and vegetables. In addition, more than 57,000 persons (or nearly three per cent.), who mentioned some other employment as the chief source of their livelihood, were also partially agriculturists; and a further 3·4 per cent., shown under the head of general labourers, were doubtless to some extent supported by work in the fields. The industrial population amounted to 17·71 per cent. and was engaged chiefly in the provision of food and drink (nearly five per cent.), and in the cotton and leather industries. The provision and care of animals gave employment to more than four per cent., personal and domestic service to 3·7 per cent., commerce to 3·2 per cent., and village service to nearly three per cent., while the professional classes, embracing religion, education, literature, law and medicine, as well as actors, singers and dancers, formed 1·52 per cent. Persons returned as having no occupation numbered more than 82,000, or over four per cent., and included people of independent means, pensioners, prisoners and beggars, chiefly the last.

Food.

Wheat is the staple food of the people in the eastern districts of Bāli, Bilāra, Desuri, Pāli and Sojat, and is consumed by the well-to-do in towns and villages elsewhere. In the Jodhpur district and in the southern and south-western *hukūmats* of Jālor, Jaswantpura, Sānchor and Siwāna, *bājra* is as common as wheat, while the people of Mārot, Nāwa, Parbatsar and Sāmbhar in the north-east habitually eat barley. In the rest of the territory, *jowār* and *bājra*, with *moth*, are the commonest food-stuffs; *bājra*, however, is more extensively consumed than any grain in the State. The use of maize is sometimes forced on the indebted agriculturist when his more valuable crops have passed into his creditor's hands, as is pathetically depicted by the proverb:—*kūrā karsā khāi, gehūn jīme *Bāniā*, meaning "the coarse grain is consumed by the cultivator, while the Baniā takes the wheat." Neither rice nor meat are in general use as an article of diet, though most of the Rājputs and some of the other Hindus are meat-eaters when they can afford it. The flesh of the goat and wild pig is highly esteemed by Rajputs, while mutton and fowl are considered inferior both in flavour and nutriment. The principal vegetables are radishes and onions, the leaves and seeds of the *khejrā (Prosopis spicigera)* being largely used as vegetable food in the western desert, and chillies are the chief condiment. In times of scarcity, many of the people subsist on the roots and seeds of grass, supplemented by locusts when they visit the country; locusts are reported to be both wholesome and palatable, when preserved by being salted. Watermelons are largely consumed, the pulp being eaten fresh and the seed dried, ground and mixed with flour for food.

* The local pronunciation of Bania.

Tobacco and opium are in general use, as is liquor among many of the well-to-do; almost all classes keep cattle and goats to get a ready supply of milk.

The daily bill of fare of the ordinary individual is very simple and hardly ever varies. The following are some of the usual dishes :—*sogrā* or thick unleavened bread, baked rather hard; *rāb* or flour boiled down thin in diluted buttermilk, generally cooked in the evening and kept for use on the next morning; *khcīh* or husked *bājra* mixed with *moth* in the proportion of about four to one, boiled down thick in water and sometimes improved by the addition of a little *ghī* or oil; *ghāt* or coarse ground flour boiled thick in water or buttermilk; and *daliā*, which is the same as *ghāt* but is boiled thin in water. *Sogrā* and *khīch* are described as fairly pleasing to the taste, but are not always within the means of the poorest classes. The commonest vegetables are the pods of the *kair*, *khejrā*, *phog* and other trees and shrubs, stocked for the year and often eaten raw, while almost the only relish used is a chutney of salt and chillies in the proportion of two to one.

The agricultural classes take four, and the artisans three meals a day. The early morning meal of the former consists of *ghāt* and either *rāb* or plain buttermilk—light refreshments which serve as a preparation for the day's work; about four hours later, the substantial breakfast is taken, *sogrā* taking the place of *ghāt*, and then follows another interval of four hours, spent in rest or sleep, especially in the hot weather; the lunch is a light affair, succeeded by hard work which whets the appetite for a hearty dinner at any time after sundown. These four repasts are respectively called *sirāwan* or *kalewā*, *rotī*, *dopahārā* and *biālu*. The artisan classes take their first meal in the morning, the second during the midday interval, and the last after sunset, *sogrā* or *khīch* forming an unfailing item of the menu.

Dress.

The dress of an adult Hindu male consists of at least three articles, namely, a *dhotī* or loin-cloth about ten feet by three feet; a *bāndiā angarkhā* or full-sleeved, close-fitting but buttonless vest; and a *potiā* or covering for the head. It is optional to wear a sheet (*kheslā*) over the shoulders so as to serve as a wrap for the upper part of the body. With the well-to-do, the *dhotī* is usually the finished loom fabric, 5 by 1¼ yards and having a coloured border, but the writer and official classes affect the *chūdīdār paijāmā* (an imitation of the Lucknow style of the Muhammadan nether garment) when appearing in public, and the *bāndiā angarkhā* is discarded in favour of the *kurtā* or shirt (usually made of soft muslin and without collar or cuffs) and either an *achkan* or a *lambā angarkhā* (long coat); similarly the *potiā* is replaced by a turban which is either the *pechā*, *pāg* or *pagrī* (a strip of fine cloth, about eighteen yards long and barely nine inches broad, embroidered at both ends and tied round the head in various modes more or less peculiar to the different leading castes) or the *sāfā* or *phentā*, which is usually half a piece of mull. Of the various styles of head-gear in fashion, that known throughout Rājputāna as the Marwārī *pagrī* or *chonchdār pāg* (that is, the beaked

turban) deserves notice; its peculiarity is the separate tissue worn round it, which is either the plain *uparnī* or the laced *balabandī*. Of colours for turbans, red and yellow in all shades are marks of rejoicing, black and plain white are strictly a sign of mourning, and other colours, such as azure, green, etc., are used on any occasion indifferently. Among the higher castes, a *dupattā* or thin cotton sheet, carelessly gathered under the armpit or worn round the neck with the ends hanging down in front or round the waist so as to go under the seat when riding, takes the place of the *kheslā*, and the use of a cotton or woollen *rumāl* or kerchief, also round the neck or over the turban, is becoming fashionable. Two peculiar items of the wardrobe of the Rājputs and of a few others are the *jādiā* and the *mūchhpattī*. The former is the bandage with which the parted beard is held in position with the hairs pointing upwards along the sides of the face; its two ends are secured over the head-dress, the process being termed *bukānā bāndhnā*, but, though its utility in training the ornament of the face is unquestionable, it has to be untied when the wearer appears before superiors. The *mūchhpattī*, as its name implies, is designed with the object of training the moustache to twirl up, and is not worn out of doors.

The dress of the adult Hindu female consists of a *ghāgrā* or skirt, a *kānchlī* or half-sleeved bodice (made to cover only the breast and not the back, and kept in position by being tied up behind), and an *orhnī* or sheet or veil, about 2½ by 1½ yards taken over the head and round the body. There are two ways of wearing this garment. The lower classes, who have to earn their bread by manual labour, generally attach the two upper corners to the skirt-band, the right corner being sometimes taken round the waist, so as to serve as a sort of *kamarband* in order that the arms may be free for work, and the portion over the head (called the *ghūnghat*) may be easily lowered over the face as a veil in the presence of strangers, superiors or elders. The higher classes, on the other hand, attach only the left corner of the *orhnī*, to the skirt-band in gathers, leaving the right free to be either doubled up on the shoulder when the arm is engaged or thrown loosely down the shoulder so that the *pallā* or portion in front may be quickly used as a veil, when all but the right eye of the lady would be concealed from view. Some castes, such as the Kāyasths and Oswāls, wear a white sheet called *thirmā* as an outermost garment when appearing in public, while others use a woollen wrap (called *lūnkār* and usually red in colour, especially in the cold weather. With the higher castes, the use, in addition to the skirt, of a *phetiā*, or piece of cloth about a yard or so in width but of the same length as the skirt, is obligatory to signify the married state; it must be of a different colour from the *ghāgrā*, but is put on only when going out-of-doors.

Among the Musalmān males, the articles of dress are much the same as those of the well-to-do among the Hindus except that the use of the *chūdīdār paijāmā* is more common at the capital and in a few of the larger towns than in small towns and villages, and that a

rumāl is almost always worn over the *pagrī* or *sāfā* when appearing in public. Moreover, the place of the *kheslā* or *dupattā* is taken by a *chaddar* or sheet generally of a check pattern; the coat is buttoned to the left instead of to the right, as in the case of Hindus and Europeans; and the *dhotī* is doubled up before use and therefore worn only by the half length, with a knot in the front so as to leave the upper corners free to be taken between the thighs and fixed at the back.

The Musalmān females wear *paijāmās*, a long *kurtā*—usually half-sleeved—an *orhnī*, and, when going out-of-doors, a *tilak* which resembles a flowing gown, being gathered up at the waist in innumerable tucks, but is put on like a coat as it is open in front and has close-fitting sleeves.

No account of the dresses of Mārwār would be complete without mention of that very useful article of apparel known as Jodhpur breeches. They are believed to have been invented about twenty years ago, and are a sort of combination of riding breeches and military overalls but tighter from the knee downwards than the latter are and not strapped at the foot; they are worn by many of the chiefs, nobles and officials of Rājputāna, and by British officers and others all over India.

Dwellings.

It is only at the capital and in the more important towns that substantial structures, called *hawelīs* and built almost exclusively of sandstone and mortar, are found. In the smaller towns and villages, the houses, with the exception of the residences of the Thākur and perhaps a few Mahājans, are mere huts. In the more prosperous districts, where wood for timber—particularly *babūl* and *khejrā*—is not scarce and the soil is clayey, the huts are of two kinds, *ghar* or *padwā*. The former have mud walls and flat mud roofs supported on wooden beams; the latter have walls of sun-burnt bricks and are covered with rude ill-baked tiles on sloping roofs—those with a shed roof being known as *ekdhālia*, and those with a gabled roof as *dudhālia*. In the arid and sandy tracts, the poorer people have to be content with *jhonprās* which are thatched with a combination of the wild *ākrā* shrub, rushes, reeds, and grasses. The agricultural classes divide their residence between the huts in the village and the *dhanis* or cottage-farms, which are usually circular in shape with conical roofs of thatch. The Jāts and Bishnois seem to have a special preference for these *dhanis*, as they live mostly in their fields.

Disposal of dead.

Hindus cremate their dead as a rule, but ascetics like the Gosains and Sanyāsis, as well as Jasnāthis, Bishnois, worshippers of Rāmdeojī, and sometimes Mālis who die unmarried are buried. The Musalmāns always practise inhumation and erect memorial-stones or buildings; while the Bhīls almost invariably burn their dead, burying only infants and the first victim of an outbreak of smallpox.

Amusements.

The amusements of the people generally are few and simple. For the younger generation there are games resembling hockey, prisoners' base, tip-cat, hide-and-seek, blindman's buff, etc., while kite-flying is indulged in by both children and adults. Other amusements are dancing parties, musical entertainments, cards, chess

and a game rather like draughts or fox and geese. Riding exercise is taken by almost every one who can afford to keep a horse, and the Rāthor, whether born in the palace or the village, is an accomplished equestrian. Polo is much played at the capital, and some of the finest exponents in India hail from Jodhpur; other recreations of the wealthier Rājputs are pigsticking and big game shooting.

Festivals.

The principal Hindu festivals observed are the Holī in Phāgan (February-March), the Sīl sātamī (in honour of Sītla the protectress of infants) and the Gangor (sacred to Gaurī or Pārbatī, the goddess of abundance), in Chait (March-April); the Akhā Tīj in Baisākh (April-May) after the reaping of the wheat crop; the Rākhi in Sāwan (July-August), when coloured cotton cords are tied round the right wrists as charms; the Tīj in Bhādon (August-September) being the anniversary of the day on which Pārbatī was, after long austerities, reunited to Siva; the Dasahra in Asoj (September-October), in commemoration of the victory of Rāma, king of Ajodhyā, over Rāvana, the demon or aboriginal monarch of Lankā (Ceylon); and the Dewāli or festival of lamps in Kārtik (October-November). The birthday (*sālgirah* or *barasgānth*) of the Mahārājā—in the present case Māh *sudi* 1st, *i.e.* in January or February—is also an occasion of much display and rejoicing at the capital. The Muhammadan festivals are the same as elsewhere, namely the Muharram, the Id-ul-Fitr and the Id-uz-Zuha.

Nomenclature.

Among the higher and middle classes of the Hindus, the names always consist of two parts, whereas the lower castes usually have but one name which, as pronounced, not infrequently ends in the letter "o." Where there are two names, the first will be that of some god or goddess (*e.g.* Bhagwān, Lachhman, Rām, Gaurī or Devī), or ferocious animal (Kesri, Nāhar, Sher), or jewel (Jawāhir, Lāl, Motī), or of the day of the week on which the child was born (Mangal); or it may be suggestive of auspiciousness or power, physical or political, such as Bakht, Bijai, Fateh, Jai, Abhai, Takht, etc. The second name, on the other hand, is usually indicative of the division to which the person belongs: thus Dās, Datt, Deo, Prasād among Brāhmans; Singh among Rājputs, though this is also the second name of some of the Purohits and of one family in the *mutsaddī* or official section of the Oswāls; and Chand, Rāj and Mal among Mahājans. Of the numerous Sūdra castes, the Mālis and Sonārs alone show a preference for double names, combinations of Rām being most popular, such as Rām Bhajan, Rām Pratāp, Siva Rām and Ganga Rām. A few typical names of the others will suffice. Rāwatio and Parbudo (Jāt); Lachhmana, Girdhāri and Kālu (Bishnoi); Hema, Kalla and Rūpla (Sīrvi); Kānho, Bādlo and Pīro (Rebāri); Shobhlo, Dhanno and Gainio (Kumbār); Gumānio, Bherio and Binjio (Balai); Padmio, Bālio and Khetio (Bhīl); and Motia, Pālia and Kūmpla (Mīnā). The preponderating use of the final "o" among these lower classes is ascribable to the ease it gives in the utterance of the name as a vocative.

In the matter of titles, the Srīmālis and the Dāima section of the Chenniyāt Brāhmans place the term "Pandit" before, and "Sharma"

after their names (*e. g.* Pandit Chhagan Lāl Sharma), while with the Kashmīri Sāraswats, who attach sept distinctions to their proper names, the term Pandit has by long usage come to be regarded as a caste appellative (Pandit Sūraj Prakāsh Kaul). The Pushkarnas state the name of their sept, and the Purohits that of their caste, before their proper names (Joshī Askaran and Purohit Kesri Singh); while of the land-owning Rājputs, those who are members of the chief's family are entitled Mahārājs and the rest are Thākurs or Raos. Both the Hindu and Jain Mahājans generally attach either their clan or occupational distinction, such as Seth (banker) or Gandhī (perfumer), and most of the smaller subdivisions of the Oswāls use the comprehensive term Sāh before their names. Among Musalmāns, names expressive of thankfulness to God are not rare (Alā-ud-dīn, Khudadād, Rahīm Baksh), but the prevailing practice is to call the child after some hero, ferocious animal, pet idea or the rose, and to add the term Khān. The *pardesīs* or foreigners generally indicate their race distinctions (Saiyid, Sheikh, etc.), while the *desīs*, such as the Kaimkhāni Rājputs, retain their original clan distinctions.

The foregoing observations apply to the male sex only; the names of females, whether Hindu or Musalmān, are mostly simple, not composite. Hindu and Jain girls may be called (*a*) after some goddess or heroine, or (*b*) something that is beautiful, fragrant, delightful or valuable, and the widest range of ideas is naturally found among the higher and more cultured castes; the names of Musalmāns are almost exclusively of the second of the two kinds noted above. As between ladies of a family group, whether among Hindus or Muhammadans, persons are usually not mentioned by name but are referred to or addressed in terms of relationship.

A few curious points in respect of Hindu nomenclature may be mentioned. Among the higher classes, the names given at birth are in some cases different from those by which the holders are known in society. The former, or birth-names, are determined by an astrologer and made to begin with a particular letter or syllable, according to the time of the day or night when, and to the star under the influence of which, the child was born, and as such may be supposed to foreshow to the initiated the whole life history of the individual. It sometimes happens that the birth-name begins with the same consonant or syllable as the appellation of some superior or elderly relation, whom the social code forbids the child's mother to address by name; and in such a case a second name is given, which the mother can utter without breach of family etiquette. Again, a child, born shortly after the death of some earlier brother or sister, is either nameless for a number of years or given some uncouth name to avert misfortune.

The most common suffixes used in the names of places are *pur, pura,-wāna,-wāra,-wāri,-wās,-āwal,* and *-nagar,* all meaning town, village, hamlet or place of settlement; *-sar* or salt lake; and *-garh* or fort.

CHAPTER IV.

AGRICULTURE.

General conditions.

As already observed, Jodhpur is, speaking generally, a vast sandy tract improving gradually from a mere desert in the west, north-west and south-west to comparatively fertile lands along the eastern border. The rainfall is almost everywhere scanty, water is usually far from the surface, and artificial irrigation is in many places impracticable; the greater part of the territory possesses neither rivers nor forests, while in places in the west cultivation is impossible, the soil being so salt and sterile as to nurture only grass which springs up with the rains and withers away immediately. The most fertile districts are Bāli, Bilāra, Desuri, Jaitāran, Mārot and Sojat, where wells abound, and both spring and autumn crops are grown, while at the other extreme are Sānkra, Sheo, Shergarh and parts of Mallāni, where but few wells exist and practically only autumn crops are raised.

Soil classification.

The chief natural soils are locally known as *matiyāli*, *bhūri*, *retli*, and *magrā* or *tharrā*. The first is a clayey loam of three kinds, namely *kāli* (black), *rāti* (red) and *pīli* (yellowish), and is said to cover about eighteen per cent. of the cultivated area for which returns exist. It is the richest soil in the State and does not need frequent manuring but, being stiff, requires a good deal of labour; it is found only in the favoured districts where, when the rainfall has been good, it yields excellent crops of wheat, gram and cotton, as well as of *jowār* and *til*, for several years in succession. The second *(bhūri)*, which is brown in colour and has less clay in it than *matiyāli*, is the most prevalent soil, occupying more than fifty-eight per cent. of the cultivated area, and requires but moderate rains; it is easily amenable to the plough, fairly rich (though it needs a certain amount of manure), and is eminently suitable for crops like *bājra* and *moth*; it is generally used for three or four years and then left fallow for a similar period. When the rains are heavy, these two soils *(matiyāli* and *bhūri)* produce wheat and gram without artificial irrigation, the crops being known as *sewaj*. The third class of soil *(retli)* is fine-grained and sandy, without any clay at all, and forms about nineteen per cent. of the cultivated area; it requires light and timely rains and, when used for autumn crops (as is almost invariably the case), is never manured. This soil, when found in a depression, is called *dehri* and, as it retains the drainage of the adjacent high-lying land, yields good crops of *bājra* and *jowār*, but when on hillocks or mounds, it is called *dhora* and, the sand being coarse-grained, is a very poor soil requiring constant rest. The fourth class *(magrā* or *tharrā)* is hard and contains a considerable quantity of stones and pebbles; it is generally found on the slopes of hills and is said to occupy about four per cent. of the cultivated area.

System of cultivation.

The agricultural methods employed are of the simplest description. When new land is to be brought into use, the bushes and shrubs are cut down and either burnt on the spot in order to fertilise the soil or used as fences for the field, and the ground is then roughly levelled; this clearing process is called *sūr*. For the autumn crops, ploughing operations usually begin with the first fall of sufficient rain—not less than one inch—or even earlier where, as in some villages of Nāgaur, the soil is clayey; the land is ploughed once, twice or three times according to the stiffness of the soil, and these three ploughings are respectively called *phar*, *chauk* and *bijāri*. Either a camel or a pair of bullocks is yoked to each plough, though sometimes donkeys and buffaloes are used. Where the soil is clayey the field will next be harrowed in order to break up the clods and make it level, and thus enable it to retain the moisture. The process of sowing is called *bijāri*; the seed is sometimes scattered broadcast, especially in the case of *til*, but generally by means of a bamboo drill attached to the plough; and, after it has sprouted, a few showers at long intervals will bring it to maturity. In light soil, a man with a pair of good bullocks can plough from five to seven *bīghas* (two or three acres) a day, and, using the drill, should sow about six *bīghas* daily.

More trouble is taken with the cultivation of the spring crops. The land is ploughed from five to seven times and is harrowed and levelled, while considerable attention is paid to weeding (called here *ninān*); in some of the villages of Nāgaur the weeding is done by passing a plough *(halnī)* over the crops when they are about knee-high—an operation requiring great skill. Subsequently, thorn fences or hedges of *thor* are erected to keep out cattle, deer and pig; scarecrows are set up to frighten away birds; and persons are engaged to keep watch and are provided with slings or a noisy instrument made of peacock feathers and called *thalī*.

The reaping *(dūchni* or *lāoni)* is done by men styled *dengiyās* or *bariās* at the rate of about a *bīgha* a day per head; stalks bearing ears are cut down with a sickle *(dāntli)*, while those bearing pods are uprooted; they are placed by the reaper in a bag *(jholī)*, worn on the body, and are eventually deposited by him at a fixed spot in the field, whence they are conveyed in carts or on camels to the threshing-floor *(lātā)*. The process of threshing is called *gāitā*; the stalks are placed in heaps, and the grain is separated from the straw by the feet of bullocks which are driven round a pole *(med)* set up in the middle of each heap. Winnowing is known as *uphanna* and is dependent solely on the wind; the grain is placed in a basket *(chhāj)* which is shaken slowly from a height, and the chaff and refuse particles being lighter are blown to a little distance, while the grain falls straight to the ground. The chaff of wheat and barley is collected and used as a supplementary fodder, but little or no care is taken of that of *bājra*, *jowār*, etc.

Agricultural population.

More than 1,208,000 persons, or nearly 62½ per cent. of the population, were returned in 1901 as dependent on pasture and agriculture; and the actual workers included in these groups numbered

more than 46 per cent. of the male population of the State and 36½ per cent. of the female. In addition to these, some 51,000 persons recorded agriculture as a subsidiary occupation. The great cultivating classes are the Jāts, Bishnois, Sīrvis, Pātels, Kalbīs and Mālis, all of whom are hard-working and skilful; the Mīnās, Rājputs and Kaimkhānis also cultivate, but the two last make indifferent husbandmen. The Bhāmbis and Sargaras are the field-labourers, and the blacksmiths, carpenters and potters all give their professional aid by supplying or repairing the various agricultural implements.

Two crop-growing seasons.

There are two main crop-growing seasons, the *khārīf* or, as it is usually called here, *sāwnu*, and the *rabi* or *unālu*. The sowing of *sāwnu* (autumn) crops begins with the first rains, usually about the middle of July, and in normal seasons extends to the end of August; these crops are annually reaped between September and November. The *unālu* (spring) crops are sown usually in October and November, and are harvested in April and May. The autumn crops, which are by far the most important, and the chief mainstay of the people, are dependent for their cultivation on the rains of July and the first half of August, and for their maturity on good falls in September and slight showers early in October; but in Mārwār the September rains are generally light and irregular and cease altogether before the end of that month, and the hot sun makes "the sky as of brass and the earth as of iron," or, as the proverb runs, "the scorching heat of Asoj (September-October) drives the Jāt to asceticism." It has been estimated that the proportion of out-turn of food grains from *sāwnu* to that from *unālu* is for the whole State as eleven to five. The principal autumn crops are *bājra*, *jowār*, *til*, *moth*, cotton and maize, and the chief spring crops are wheat, barley, gram and mustard.

Agricultural statistics.

Fairly reliable agricultural statistics are available for practically all the *khālsa* territory, *i.e.* for lands paying revenue direct to the Darbār, but only since 1898-99. Tables Nos. XXI and XXII in Vol. III.-B. have (up to and including the year 1904-05) * been compiled from the official publication known as *Agricultural Statistics of India* (seventeenth and twenty-first issues), and a reference to Table XXI will show that the area for which returns exist is 4,856 square miles (or rather less than one-seventh of the total area of the State) and that about four-fifths of this (or 3,869 square miles) are available for cultivation, the rest being occupied by forests, towns, villages, rivers, etc. It will be seen that the net area cropped fell from 1,460 square miles in 1898-99 to only 42 in the disastrous famine year of 1899-1900, and during the succeeding five years averaged 1,056 square miles, or about twenty-seven per cent. of the area available for cultivation. In Table XXII will be found the areas under the principal crops and the total thereof for each year, including a few square miles cropped more than once (*do-faslī*). The average annual area cropped during the five years ending 1904-05 works out to about 1,058 square miles, and of this, *bājra* occupied 46 per cent.,

* The figures for 1905-06, an indifferent year, have since been received from the Darbār, and inserted in the tables.

jowār 15, *til* and wheat each about six, barley $2\frac{1}{2}$, cottom 1·3, and gram and maize each one per cent.; the remaining crops included several small millets, pulses, oil-seeds, fibre plants, drugs, and vegetables, as well as a little sugar-cane.

The figures in the preceding paragraph, it should be remembered, relate only to about one-seventh of the State and, though imperfectly reliable, give a rough guide to the conditions in the rest of the territory. In the *Note on Irrigation in the Jodhpur State* (paragraph 17), which was published in 1903, the total cultivated area in *khālsa* and *jāgīr* lands is given as 16,417,111 acres (or about 25,652 square miles) and the uncultivated area as 5,625,621 acres (or 8,790 square miles), but a mistake appears to have been made (probably in printing), as it is quite impossible that three-fourths of the State have been under cultivation in even the very best of years. The figures, if transposed, would show the cultivated area to be a little more than one-fourth of the entire area of the State, and this is perhaps fairly near the mark in a normal year.

Bājra.

Bājra or spiked millet *(Pennisetum typhoideum)* is the staple food of the majority of the people, and is more extensively grown than any other crop, thriving best in sandy soil. It is sown with the first fall of sufficient rain, takes from seventy to ninety days to ripen, and the average yield per acre in $1\frac{3}{4}$ cwt. The stalks, called *kharia*, are saltish and are consequently sparingly used as fodder, but are suitable for thatching huts. The crop is sometimes grown alone, but more commonly mixed with *moth* or *mūng*.

Jowār.

Jowār or great millet *(Andropogon sorghum* or *S. vulgare)* requires a stiffer soil and a greater amount of rain than *bājra*. It is sown between the middle of July and the end of August, and is harvested in October and November, the average yield being about two cwt. per acre. When the crop is ripe, the heads are cut off and the stalks (*karab*) are carefully stacked and subsequently given to cattle; if, owing to insufficient rain, the *jowār* is not thriving well, the stalks are often cut while green and stored for fodder, called *chīptū*, which fetches a better price than *karab*.

Wheat.

Wheat is the chief spring crop and is of two kinds, *pīwal* and *sewaj*. The former is grown on lands attached to wells and is irrigated; if irrigated by saline water, it is called *khārchiā* and if by sweet water, *mithāniā*—the first variety being considered the better. The soil is prepared in the most careful manner during the rainy season by being repeatedly ploughed and sometimes watered once. Sowing begins about the middle of October, and the seed, which is applied at the rate of 60 to 100 lbs. per acre, is sown through the tube attached to the plough or sometimes, as in the bed of a tank, dropped by hand in the furrow. The crop takes from five to six months to come to maturity, and requires four or five waterings; the average yield per acre is seven cwt. of grain. Wheat is reaped with a sickle and collected into bundles, and, as the crop is usually very dry when harvested, it can be threshed almost at once. The green ears, when roasted, are called *holās* and are eaten with a relish, while the straw is known

as *khākla* and is used as fodder for the cattle. The second of the two kinds of wheat, namely *sewaj*, is grown on land flooded by the rains. The ground is prepared as in the case of *pīwal*, and, when the rains cease and the water dries up, the field is harrowed to prevent evaporation. The wheat is called *kātha* and is inferior to, and consequently cheaper than, that produced under well irrigation.

Barley does not require so rich a soil as wheat, and the ordinary yield per acre is 10¾ cwt.; it is grown chiefly in the Bāli, Bilāra, Desuri and Merta districts and is irrigated from wells having sweet water. The system of cultivation is the same as in the case of *pīwal* wheat except that it requires fewer waterings, and it occupies the ground for a like period. Barley.

Gram or chick-pea *(Cicer arietinum)* is another cold weather crop, grown usually alone but sometimes mixed with barley; it is found mostly in Bilāra, Merta, Sojat and Pāli, and requires a light loamy soil, but is neither irrigated nor weeded. The land is ploughed four times before the seed is sown in October, and is then harrowed once; if rain falls in December and January, a fine crop is almost a certainty, but there is always danger of damage by frost, and lightning is supposed to be injurious if the pulse be in blossom. When the seedlings begin to branch and before flowers are produced, the leading shoots are sometimes nipped off to make the plants bushier and more productive, and the cuttings are used as a vegetable called *pānsi*. Gram ripens from February to April, is reaped with a blunt sickle, and is generally uprooted; the out-turn averages only 3½ cwt. of pulse per acre, the grain being split and used as *dāl* and the fine chaff making an excellent fodder. Gram.

Maize or Indian corn *(Zea mays)* is an irrigated crop, generally grown on lands attached to wells, and is most common in Bāli and Desuri. The fields are ploughed two or three times before the seed is sown broadcast in July or August, but a little early maize is often grown as fodder for the cattle. The crop ripens in about two months, and the out-turn is ordinarily put at 8½ cwt. per acre. The cobs *(dūnda* and *makkiā)* are picked off, stripped, dried in the sun, and beaten with sticks to separate the grain, and the unripe ones are often roasted and eaten. Maize.

Of small millets, the most important are *kuri (Panicum psilopodium)* and *manduā (Eleusine coracana)*; they are sown at the earliest possible moment and form the principal food crop of the poorer classes. The pulses include the cluster bean or *jowār (Cyanopsis psoralioides)*, horse gram or *khulāt (Dolichos biflorus)*, *mūng (Phaseolus mungo)* and *moth (P. aconitifolius)*; the last two are grown on light soil, sometimes alone but usually with *bājra* or *jowār*, and the yield is about two cwt. per acre. Subsidiary food crops.

The principal oil-seeds are *til* or sesame *(Sesamum indicum)*, *sarson* or mustard *(Brassica campestris)* and *alsi* or linseed *(Linum usitatissimum)*, but there is very little of the last. *Til* is sown broadcast and generally on clayey soil about the end of August; it ripens in October or November and the out-turn averages about Oil-seeds.

two cwt. of seed per acre. *Sarson* is a cold weather crop, grown on land either attached to wells or irrigated from canals, and in the former event it is sown with wheat. The ordinary out-turn is about six cwt. per acre, and the seed yields an oil which is used for cooking purposes.

Fibres.

Cotton is by far the most important fibre, and is cultivated chiefly in Bāli, Desuri, Bilāra, Mallāni and Merta; it grows best in a stiff loam and worst in sandy soil. The ground is ploughed twice, or thrice, and the seeds, having been rubbed in cow dung, are sown broadcast in July. The plants are weeded once or twice before they begin to produce flowers in October or November, and from this time they require a good deal of watering until the pods open. The cotton is ready to be picked in January, and there are usually two pickings; the average yield is about 300 or 400 lbs. of *kapās* (seed and lint) per acre. The *kapās* is passed through a hand-mill *(chakkī)* which separates the lint from the seed, and the latter is given to milch cows and she-buffaloes. When the rainfall has been copious, cotton is grown on unirrigated land, but the out-turn would then be considerably less than that stated above. Another fibre plant is *ambāri* or roselle hemp *(Hibiscus cannabinus)*; the seed is sown broadcast on the edges of the cotton fields, and the crop is cut in November or December, the yield being about six cwt. of clean fibre to the acre. The plants are tied up in bundles, and in May or June, when ropes are required, are soaked in water; when sufficiently moistened, the bark is stripped off and the stems are used as fuel.

Drugs and stimulants.

The poppy is cultivated to a small extent, chiefly in Sojat, but opium is not extracted. The seeds are used medicinally and the capsules are soaked in water which, after being strained, is taken as an intoxicant. A coarse tobacco is grown round some of the village sites and is consumed locally, and there are generally a few acres under Indian hemp *(Cannabis sativa)*.

Fruit and vegetable production.

The principal fruits produced in Mārwār are watermelons, locally known as *matīra*, and *singhāra* nuts *(Trapa bispinosa)*; guavas, mangoes, oranges, plantains, plums and pomegranates are also grown in parts. The vegetables include the cabbage, carrot, cauliflower, egg-plant, garlic, onion, potato, radish, sweet potato, turnip, and several of the gourd and cucumber family.

Agricultural implements.

The agricultural implements are of simple construction, and no new appliances have been introduced except the *hāth halia* or hand-plough, which came into use in the famine of 1899-1900 and is still worked by those who have no bullocks, but it is suitable only for light soils. The ordinary plough consists of the *hal* or wooden boot; the *nāli* or peg attached to the upright shaft let into the boot and used as a handle; the *halwāni* or iron share; the draught pole projecting in front; the *jorī* or neck-yoke of the bullocks; and the *jot* or collar strap. Attached to the shaft is the *bīnjni* or *nāri*, a hollow bamboo tube with a funnel-shaped mouth at one end through which the seed is dropped. The clod-crusher *(kūri* or *sāvar)* is simply a log or beam dragged over the fields by bullocks to level the ground and gather

together some of the weeds. The hand-tools include the pick *(kudāli)*, the spade *(phaorā)*, the weeding-hoe *(khurpī)*, the sickle *(dāntli)*, the rake with wooden teeth *(dantāli)*, the pitchfork *(jai)* used for lifting brambles, and the winnowing scoop *(chhāj* or *chhājla)*.

Use of manure.

Manure is applied chiefly to fields attached to wells, on which wheat, barley, cotton and other valuable crops are raised, though, where it is easily available, it is also given to dry lands. The dunghill *(okhardī)* is started outside the village just before the rains, and consists of straw, house sweepings and all sorts of refuse. The droppings of cattle, being too wet to be made up into fuel-cakes in the rains, are also thrown on to the heap, but the dung of goats and sheep *(mengnī)*, being the best and most powerful of all manures, is carefully stored in separate enclosures. When the rains are over and before the *rabi* ploughing commences, the manure is carted to the fields, piled up in small heaps, and then ploughed in. In the sandy tracts, where the fields are large and far from the village, flocks of sheep and goats are often penned at night, and almost everywhere it is the custom to burn weeds, grass, roots, etc., which cannot be used as fodder, and plough the ashes into the ground. The cost of cow dung with other refuse is about R. 1 for three or four cart-loads, while that of *mengnī* varies from R. 1 to Rs. 2 for a cart-load.

Loans to agriculturists.

Formerly the monopoly of supplying money to the cultivator was entirely in the hands of the *bohrā* or professional money-lender (usually a Mahājan), but since the introduction of the settlement in 1894-96 the Darbār has been making advances for agricultural improvements, especially the repairs of wells, and for the purchase of seed and bullocks. The amount advanced in an ordinary year is about Rs. 20,000, and interest is charged at the rate of six per cent. per annum; in unfavourable seasons larger advances are given—for example, about Rs. 27,000 in 1899-1900 and nearly Rs. 29,000 in 1901-02.

Indebtedness.

The indebtedness of the cultivators is considerable, and there are few men who do not owe something. This state of affairs is due partly to their own extravagance and imprudence, partly to recent famines and scarcities, and partly to the grasping habits of the money-lenders. The creditors are mostly Mahājans, but in the Nāgaur district some are themselves agriculturists. The Mahājans are as a rule great usurers; they render their accounts twice a year and charge compound interest, and it is very difficult for the cultivator to get clear of debt. On cash loans the rate of interest ranges between twelve and twenty-four per cent., while, in the case of grain advanced either for seed or for subsistence, the rate may be anything between twenty-five and one hundred per cent. Sometimes *bājra* or *jowār* or one of the inferior millets will be given to the cultivator on the condition that he pays back a similar, or even a greater, quantity of wheat or barley. The power of permanent alienation of land is neither enjoyed by the *ryot* nor given to the civil courts, and this healthy practice restricts the borrowing power of the former.

There being no such thing as ejectment, the most the decree-holder can do is to seize the standing crop after leaving something for the maintenance of the cultivator, as the proverb says:—*Pahile pet ne pāchhe Seth*—meaning "subsistence" (literally, the stomach) "first, and then the banker."

Live stock.

The main wealth of the desert lands consists of the vast herds of camels, cattle and sheep which roam over its sandy wastes and thrive admirably in the dry climate. The camel is a particularly useful animal, being ridden and driven, used as a beast of burden and employed in agriculture. The Mārwār camels are larger and stronger than those of Jaisalmer, and are more enduring than, but on the whole not so speedy as, those of Bīkaner. The best riding camels come from Sheo in the west and are known as Rāma Thalia; they are said to be able to cover eighty or even one hundred miles in a night without difficulty. Māllani, Phalodi, Sānkra and Shergarh also supply good riding camels, the price of which ranges from Rs. 150 to Rs. 300, but they are inferior to the Rāma Thalia breed. The ordinary draught-camel can be bought for about Rs. 80, but the female *(sānd)* is usually kept for breeding purposes, and its milk is used by Rāikās and other menial classes. Horned cattle are reared in such numbers that they supply the neighbouring States and Provinces; they are almost wild and in excellent condition, but, when taken out of the country, languish and get thin unless supplied with grain and condiments to make up for the loss of the rich grasses on which they have been accustomed to feed. The districts of Māllani and Sānchor are remarkable for their breed of milch cows which, when well taken care of, give from five to ten seers of milk at a time; prices range from Rs. 40 to Rs. 200. The best calves are usually purchased when some six months old for about Rs. 60 by the cultivators of Nāgaur, who are very skilful in bringing them up; they are carefully looked after for two or three years and then sold. The bullocks of Nāgaur are famous throughout northern India and are sold at all the principal fairs; a good pair will sometimes fetch more than Rs. 300, but the average price is Rs. 150. They are noticeable for their massive humps and long horns, and are very suitable for drawing the vehicles known as *raths* or *bailīs*; they require cleanliness and good feeding, and must be carefully tended when away from their native pastures. In Mallāni, especially in two villages (Gūrha and Nagar), the Thākurs breed horses which are noted for their hardiness and ease of pace; they grow to a good height and, though light-boned, will carry heavy weights, and cover long distances without food or water. They sell for from Rs. 200 to as much as Rs. 800 or even Rs. 1,000. Sheep and goats are found everywhere, and are largely purchased by Muhammadan butchers from Gujarāt, but only male goats are sold. The sheep, though small, fatten well and, if properly fed, yield mutton second to none.

Pasture grounds.

In ordinary years, grass is abundant in all parts of the State, but when the rains fail, the people, especially those living in the western half, have to migrate with their cattle to Mālwā, Sind, the United

Provinces, or other places where good pasturage is to be found. Although the forests are thrown open to grazing in times of famine, they are situated almost entirely along the eastern frontier, the difficulty of transporting fodder is often insuperable, and the number of cattle which can be admitted is limited. Camels and goats, which subsist largely on thorny bushes, are, however, easily maintained, even in years of drought.

Fairs.

Two great fairs are held in Mārwār, one at Parbatsar and the other at Tilwāra. The former, known as the Tejājī-kā-melā, takes place in Bhādon (August-September) and lasts for ten days; it is attended by some 10,000 people, and bullocks and donkeys are sold in large numbers. Tilwāra is a village near Bālotra, and the fair held there in March is often called the Chaitri after the month of Chait (March-April); many bullocks, calves, camels and horses change hands, and the attendance is usually larger than at Parbatsar. Small local fairs are held all over the country, notably at Mūndwa in the Nāgaur district, and many of the cattle, camels and horses are taken to the well-known gathering at Pushkar near Ajmer.

Diseases of cattle, camels, etc.

The prevalent cattle diseases are pleuro-pneumonia *(motā rog)*, rinderpest *(mātā)* and foot-and-mouth disease; the last is called *muāro* in the initial stage, lasting for about three days during which a whitish mucus is discharged from the mouth, and *khurāro* in the final stage when the hoof begins to rot. It is not so fatal in the semi-desert regions as in the north-western districts; various native remedies are used, several of which are of little value, but segregation is seldom attempted, and the cultivators generally say that it is impracticable. The dangerous diseases from which camels suffer are locally called *kālia bao* and *tibarsā*. An animal attacked by the former is said to shiver, fall down and expire; the only treatment is to slit the ears, and, if blood exudes, the beast is safe, whereas, if no blood issues, a fatal ending is certain. *Tibarsā* is described as a sort of remittent fever, lasting sometimes for three years; the patient avoids sitting in the moonlight, seeks shade, and gradually wastes away. The diseases of the buffalo are *jhenjā*, a skin disease disappearing in three days if promptly attended to, and *chiri*, an affection of the lungs, causing the animal to run at the mouth and refuse food, and terminating fatally within twelve hours if proper remedies are not applied. Goats suffer from (i) *galtiya*, a disease of the throat, which can be cured by lancing the affected part where a poisonous fluid has collected; (ii) *burkiyā*, when the animal turns round and round, falls and expires, and for which there is no known remedy; (iii) *pephūria*, an affection of the lungs; and (iv) *mātā*, or rinderpest, which is very fatal when it appears and usually carries off more than half of the flock.

Irrigation.

Irrigation is practised in three different ways, namely from wells *(chāhi)*, by canals from large tanks *(nahri)* and by inundation *(sailābi.)* A reference to Table No. XXI in Vol. III-B. will show that, in that portion of *khālsa* territory for which returns exist, the irrigated area fell from 202 square miles in 1898-99 to 33 in 1899-1900 and has

since averaged 100 square miles annually, or about one-ninth of the average net area under crop.

Wells.

The chief sources of irrigation are the wells which are said to number 54,542; of these, 40,646 contain sweet, and the rest brackish water. Further, 34,050 are *pakkā* or masonry and 20,492 are *kachchā* or unlined, and of the total number of wells, 7,520 are situated in *khālsa* villages. The number of the latter actually worked during 1905-06 was 4,198 (3,098 sweet and 1,100 saline), and the area irrigated therefrom was about 29,225 acres. The cost of a *pakkā* well varies from Rs. 250 to Rs.1,000 according to size and depth, while that of a *kachchā* one, which will last for many years, is Rs. 200 or Rs. 300; the shallow pits dug along the banks of rivers cost from ten to twenty rupees each Different water-lifts are used for different depths. Thus, when the water is about four feet from the surface, it is raised by means of an *odia* or bamboo basket, covered with leather and having a rope attached to either side; and when the depth is about nine feet, a contrivance called *chānch* or *dhenklī* is used, consisting of a wooden beam balanced on a vertical post, and having a heavy weight at one end and a small leathern bucket or earthern jar at the other. Another species of lift employed when the depth is about fifteen feet is the *pag pāvti* or miniature Persian wheel which, as its name implies, is worked by the feet. For lifts of over fifteen feet bullock-power is almost invariably employed, the most common contrivance being the *jhelwā* or *charas*, a large leathern bag fastened to one end of a rope which passes over a pulley overhanging the well. When the bag has been lowered, the other end of the rope is attached to a pair of bullocks who then walk down a ramp of a length approximately equal to the depth of the well. When the bullocks arrive at the end of the ramp, the bag has been drawn up to the top of the well and its contents are emptied into a trough, generally by a man who stands by, but sometimes by a self-acting mechanical arrangement, called *sūndia*. When the ordinary *jhelwā* is used, the services of five men are needed, namely two drivers, called *kīliyā* from the peg *(kīli)* which fastens the rope *(lāo)* to the yoke, two to catch and empty the bag (working half a day each as the labour is severe), and one, styled *pāntiyā*, to look after the channels and distribute the water over the field. There should also be four pairs of oxen, two working at the same time, *viz.* one coming up and the other going down the ramp, with a relief about noon. The well is worked from dawn till sunset, with a rest of three hours in the hot weather, and a pair of bullocks should draw in a day sufficient water to irrigate from one to three *bīghas** according to the depth of the well. The alternative to the *jhelwā* is the Persian wheel *(arath)* which is used chiefly in the south-eastern districts. It consists of a large number of water-pots passing over a vertical wheel erected over the top of the well, and rotated by means of rough wooden gearing which is worked by a pair of bullocks walking round a circular track. The labour is much lighter than in

* 2½ *bighas* are equal to one acre.

the other process, as the driver sits on the beam to which the yoke is attached and needs no assistance; the well, moreover, can be worked at night if it holds enough water and bullocks are available.

Tanks.

The State possesses altogether thirty-five tanks used for irrigation purposes, and twenty-four of them are situated in *khālsa* villages. The three largest, namely the Jaswant Sāgar, the Sardār Samand and the Edward Samand, have already been briefly described in Chapter I, Part II of this volume, and they can, when full, irrigate 20,000, 18,000, and 6,000 acres respectively. Others deserving of mention are those at Chopra, Jograwās, Khārda and Sādri; the rest are small and are useful only as producing crops of wheat in their beds. The total *khālsa* area irrigated from tanks during 1905-06 was about 3,553 acres, namely 3,103 acres by means of canals and other distributaries, and 450 in the beds themselves. A good deal has been done during the last seventeen years in constructing storage reservoirs of all sizes at a cost exceeding twenty-seven lakhs of rupees, and the subject has been receiving increased attention since the appointment of the Irrigation Commission in 1901 and of a Consulting Engineer for Irrigation in Rājputāna in 1902.

CHAPTER V.

Rents, Wages and Prices.

Rents. Rents in the proper sense of the term are found only in that portion of the State which is held on certain conditions by individuals such as *jāgīrdārs*, *ināmdārs*, etc., or which has been granted in charity to Brāhmans and Chārans, or to temples. They are collected mostly in kind, the landlord taking from the cultivator a share of the produce varying from one-sixth to one-half according to the kind of crop grown and the caste of the peasant. The system is, however, losing ground in the public estimation, and produce rents are almost everywhere being replaced by payments in cash. In the *khālsa* area, rents are quite unknown. The Darbār deals directly with the cultivator, and is both landlord and proprietor. The revenue system is *ryotwāri*, and the State demand, which fluctuates with the out-turn of the year, has since 1894 been collected wholly in cash at rates varying from 1¼ annas to Rs. 10 per acre, though, where fruit-trees are grown, as in the suburbs, the rate is sometimes as high as Rs. 35 per acre.

Wages. Wages vary considerably in different localities, and depend mainly on the demand and supply of labour; they are said to have increased considerably during the last twenty years, especially those of blacksmiths, dyers, goldsmiths and the ordinary landless day-labourers. In Table No. XXIII in Vol. III-B. an attempt is made to give the average daily wages of skilled and unskilled labour at certain important centres at the present time, but for unskilled labour the daily rate is not an accurate guide to the monthly or annual rate, since employment is not constant. The table shows that the blacksmith, carpenter and weaver each earn from four to eight annas a day, the mason, stone-dresser and tailor from four to six, the painter from four to five, the dyer from three to ten, and the goldsmith from six to twelve. Turning to unskilled labour, it will be seen that a camel or bullock-cart with an attendant or driver can be hired for six annas a day at Merta and for from eight to twelve annas at the other places, while the daily wage of the coolie varies from two to four annas, and of the waterman or *bhīsti* from two to as much as eight. It is reported that during the last twenty years the daily earnings of blacksmiths, brasiers, carpenters, dyers and goldsmiths have increased by two or three annas, and of tailors and day-labourers by one or two annas; while cartmen, camelmen and weavers generally receive two or three annas less than they used to.

In the districts, wages for agricultural labour are mostly paid in kind and are not infrequently supplemented by gifts of clothes or other small perquisites. The village artisans and servants, such as blacksmiths, carpenters, potters, workers in leather, barbers and washermen are almost always remunerated in kind at the time of harvest.

Prices.

Continuous records of prices are available from 1873, and Table No. XXIV in Vol. III-B., which has been compiled from the official publication entitled *Prices and Wages in India*, shows for the State as a whole the average retail prices of the four principal food grains and of gram and salt during the periods 1873—80, 1881—90, 1891—1900 (excluding famine years), and in each subsequent year. The price of salt is of course regulated by the varying rate of duty and the cost of transport, and has ranged from more than 54 seers per rupee in *1876* to 12¾ seers in *1894*, the present price being about 16¾ seers. The lowest average prices of food grains recorded during the last twenty-three years have been (in seers per rupee):—wheat 18·14 in *1885*; and barley 26·7, *bājra* 24·95, and *jowār* 27·9, all in *1876*; while the highest have been:—wheat 8·87 and *jowār* 9·54 in *1897*, and barley 11·57 and *bājra* 10·14 in *1900*. From an examination of the figures in the publication above mentioned it would seem that a general rise occurred during the latter half of the decade ending 1890. Thus, whereas the prices of wheat, barley, *bājra* and *jowār* were respectively 18, 24, 21 and 23 seers per rupee in 1885 or 1886, they have since averaged 12, 17, 15 and about 16 seers, and in this calculation years of famine have been left out of account.

A more remarkable feature has been the equalisation of prices, largely due to improved communications, especially railways. In the acute famine of 1868-69, when there were no metalled roads and no railway, wheat at one time sold for 3¾ seers for the rupee, whereas in 1899-1900, when a similar calamity befell the country, the railways poured in enormous supplies of grain from without, and the highest quotations were:—wheat nearly seven, and *bājra* and *jowār* more than eight seers.

Table No. XXV shows the average monthly prices of food grains at the capital during the last ten years, excluding 1899-1900 and 1900-01. In the State as a whole, grain is cheapest for a month or so after the harvests, when the producer is forcing the sale in order to secure the means wherewith to pay his revenue as well as some portion of his debt to the village banker, and it generally becomes dearer the further one advances from this period.

Material condition of the people.

The material condition of the urban population is on the whole satisfactory, and the standard of living is considerably higher than it was fifty years ago; the agricultural population, on the other hand, has become impoverished from bad seasons, and where there has not been a perceptible falling-off, there has at any rate been little or no progress. The style of living of the middle-class clerk, the landless day-labourer and the ordinary cultivator in former days and at the present time may be briefly noticed.

The clerk has certainly improved in every way. In place of the scanty, coarse and clumsy clothes which characterised his predecessor even in his own earlier years, he has adopted a style of dress which is both costly and superior. The fine Manchester-made cloth has superseded the local *rezā*, and the *dhotī* has made way for a pair of trousers; his children and female belongings are better dressed,

and on occasions of marriages and festivals there is often quite a display of glittering finery in clothes and ornaments. An improvement in the design, construction and furniture of his habitation is also noticeable. The *kachchā* or humble thatched dwelling has been replaced by a *pakkā* house, the floors and walls of which are plastered instead of being occasionally coated with cow dung; the rooms are larger, loftier and better ventilated, and latrines, formerly conspicuous by their absence, now form part of almost every building. The bare floors are often covered with cheap carpets or rugs, and the furniture includes a few stools, chairs, a table and some bedsteads. Metal cooking utensils have taken the place of earthen pots, and the food is generally of a better class—rice and wheat instead of *bājra* and *moth*. The smoking of foreign cigarettes and the chewing of betel-leaves, formerly regarded as veritable luxuries, is common, and there is hardly a clerk who has not got his *chākar* or servant, while some also keep a female domestic (*deorī*).

The landless day-labourer, in his Protean forms as a porter at the railway station, as a mill-hand, as a household servant, as a water-carrier, etc., has also made great strides. He has discarded the rude surroundings of his village and has plunged headlong into a city life, where his services are in considerable demand and he earns much higher wages than he used to. Lastly, there is the cultivator, a stationary being from whom the spirit of the times and the genius of modern civilisation evoke no sympathetic response. He has shown no preference for new implements of agriculture, but plods along as best he can with his antiquated tools. He is generally in debt, and his style of living, as regards dress, food, house and furniture, is much the same as it was twenty years ago.

CHAPTER VI.

Forests and Minerals.

Forests. Area and position.

The forests of Mārwār occupy nearly 345½ square miles and are found mostly on the western slopes of the Arāvallis in the districts of Bāli, Desuri, Parbatsar and Sojat, and in Siwāna. Of the above area, 275·11 square miles are the property of the Darbār and the rest (70·37 square miles) belong to certain *jāgīrdārs*, but the entire tract is under State management.

Soil and forest growth.

The prevailing rock is granite with which are associated schists and other metamorphic formations, and the result is a poor soil which, coupled with a scanty rainfall, permits of the growth of deciduous trees only. There are three zones of vegetation. On the higher slopes are found *sālar (Boswellia thurifera)*, *gol (Odina Wodier)*, *karāyia (Sterculia urens)* and *golia dhao (Anogeissus latifolia)*; below these come *dhao (Anogeissus pendula)* and *sālar*, while hugging the valleys and at the foot of the slopes are *dhāk (Butea frondosa)*, *ber (Zizyphus jujuba)*, *khair (Acacia catechu)*, *dhāman (Grewia oppositifolia)* and sometimes *dhao*. The last named and *khair* are the principal timber trees, being both superior in quality to and more numerous than the other varieties. *Tīmru* or ebony *(Diospyros tomentosa)* is found sparingly, and *babūl (Acacia arabica)* is rather a tree of the plains. The minor products include bamboos, grass, honey, wax, gum, and certain tubers (called *safed mūli* and *satāwar*) of the asparagus species.

History.

The question of forest conservancy was first taken up in 1884 when a special officer was deputed from Ajmer to examine the wooded tracts on the eastern frontier, and on his recommendation the Darbār applied for the services of a qualified ranger from the Punjab who joined in the following year. It was found that practically the entire forest area belonged to *jāgīrdārs*, and negotiations were accordingly started with the latter with the result that in the course of two years the greater part of it was acquired by the State, either by paying compensation to the owners or by giving them other land in exchange. Thus, though the department came into existence in 1888, the work of conservancy began in 1890, and it was not until 1894 that the last Thākur agreed to place his forests under the management of the Darbār. At first the people did not take kindly to the scheme which necessarily subjected them to some, although very mild, restrictions, but the opposition has now entirely disappeared and the relations between the forest staff and the populace are sufficiently harmonious. The villages in the vicinity are, in consideration of their respective rights and privileges, divided into four classes; the inhabitants of the first group, who live actually within the forest area, get all kinds of produce free, those of

the second and third groups get certain articles free and others at reduced rates, while those of the fourth class pay ordinary fees.

Control and management.

For administrative purposes the forests are divided into four ranges, and the staff at present employed consists of a Superintendent, four rangers, six foresters, one hundred guards, and a small clerical establishment, costing altogether about Rs. 10,000 yearly. The entire area has been demarcated, most of the cultivated fields having been excluded, and is protected by means of fire-lines cut on every side. A special establishment of fire-watchers is employed during the hot months, and these measures have on the whole been successful, though the neighbouring State of Udaipur does not co-operate properly. A survey on a scale of four inches to the mile was started in 1902, and 203 square miles have since been surveyed and mapped at an average cost of Rs. 33-4 per square mile.

The forests are entirely closed to camels, sheep and goats, but horned cattle are admitted except during the rains. It was at one time feared that they could not be utilised for grazing purposes because there were very few places where water was available, but this drawback has lately been removed by digging tanks at various spots. In times of famine, cattle are allowed to graze throughout the year, and the people are permitted to cut grass and fodder and gather tubers, fruits, flowers, etc. free of charge; these concessions were much appreciated in 1899-1900.

Statistics of produce and revenue.

The out-turn during the year 1905-06 was 51,814 cubic feet of timber, 970,398 cubic feet of fuel, 219,771 bamboo stems and about 4,458 tons of grass. The average revenue for the ten years ending March 1900 was Rs. 20,783 and the expenditure Rs. 16,598, or an average surplus of Rs. 4,185 per annum; the net revenue has since been:—Rs. 376 in *1900-01,* a year of drought and sickness; Rs. 4,043 in *1901-02;* Rs. 5,709 in *1902-03;* Rs. 6,544 in *1903-04;* and Rs. 12,003 in *1904-05.* The actual receipts in 1905-06 were Rs. 48,204 and the disbursements Rs. 37,734, or a surplus of Rs. 10,470. These figures relate only to forests which are the property of the Darbār; those which still belong to *jāgīrdārs* but are worked by the department generally yield a net revenue of about Rs. 2,000.

Fuel and fodder reserves.

In addition to the forests, the department looks after certain fuel and fodder reserves situated in *khālsa* villages and occupying an area of twenty square miles. They were started in 1895 on the lines recommended by Dr. Voelcker and are gradually being extended. During the last ten years, two opportunities of testing their utility have occurred, and they were found to appreciably answer their purpose. The expenditure to the end of March 1901 was about Rs. 4,500 and has since averaged Rs. 760 yearly.

MINERALS.

Salt, marble and sandstone excepted, very few minerals of value have so far been met with, though, judging from the nature of the rocks, it is possible that the country is capable of yielding gold, silver and copper ores, and coal. According to tradition, gold was formerly obtained in Jālor and zinc near Sojat, and lead and copper mines are said to have been worked in the district last mentioned as well as

in several others, notably on the Pūnagarh hill near Pāli. The minerals of secondary importance comprise gypsum and selenite, fullers' earth, mica, asbestos, hematite and other iron ores, granite, calcite or Iceland spar, serpertine, talc and steatite.

Salt. Salt, chiefly in the form of sodium chloride associated with sodium sulphate and sodium carbonate, is found in great abundance at several places, such as the lakes at Dīdwāna, Pachbhadra and Sāmbhar, the depressions at Phalodi and Pokaran, the *jhīls* at Kuchāwan and Sargot, and along the Lūni river. Under the treaties of 1870 and the agreement of 1879, the manufacture of salt is practically a monopoly of the Government of India and for the last fourteen years or so has been carried on only at Dīdwāna, Pachbhadra and Sāmbhar. Details regarding the methods of manufacture, the quantity produced, the cost of extraction, etc. will be found in the separate articles on these places in Chapter XXII below, and it will suffice here to state that the annual out-turn during the last ten years has averaged 165,740 tons worth about 9·55 lakhs, the yearly sales have been nearly 183,000 tons, and the annual net revenue derived by Government approximately 93 lakhs or, say, £620,000. Under the fourteenth article of the agreement of 1879, the manufacture by the Darbār of *khāri* or earth-salt for industrial purposes is permitted at certain petty works in two villages near Bilāra, but the out-turn in any one year is not to exceed 20,000 maunds (about 732 tons). During the last five years, the amount manufactured has averaged only 4,359 maunds annually.

Marble. Next in importance to salt comes marble, quarried mostly at Makrāna (twelve miles from the Sāmbhar lake) but to a small extent at various places in the Arāvalli hills, such as Sonāna near Desuri in the south-east. The Makrāna marble is fine-grained and white, and has been celebrated for centuries; it was used in the construction of the Tāj Mahal at Agra. The twenty-six quarries at present being worked give employment to about 110 labourers, chiefly of the Silāwat caste of the local Muhammadans, and the average yearly out-turn is about 1,000 tons as compared with 300 tons ten years ago. The royalty paid to the Darbār at the rate of eight annas per maund of fine marble and two annas per maund of grey marble varies from Rs. 16,000 to Rs. 20,000, and in 1905-06 (when the out-turn was 1,540 tons) amounted to Rs. 22,256. The Sonāna variety is inferior, being neither so fine in grain nor so white in colour, and the demand for it is purely local. Two quarries are worked, but no record is kept of the output.

Sandstone. Sandstone is plentiful in many parts, being found at Bārmer, Jodhpur city, Khātu (in Nāgaur), Sojat, Tīvri (in the Jodhpur district), etc. It is both fine and coarse-grained, and varies in colour from deep red at Tīvri and brown and pink at the capital to yellow at Khātu; it is quarried in blocks, large and small, takes a fine polish, and is eminently suitable for carving and latticework. It has been used locally for building purposes for ages, but very little was exported till 1902 when a demand for it arose in Sind. There are more than 140

quarries at Jodhpur itself, and they give daily employment to about five hundred men drawn chiefly from the Māli community of the Hindus and the Muhammadan class of Silāwats. The yearly out-turn of sandstone in the entire State is about six or seven thousand tons, and the income derived by the Darbār from a nominal fee of one pice per camel-load averages about Rs. 2,000 annually.

Gypsum and selenite.

Gypsum (or *khādi*, as it is locally called) is found in considerable abundance in the Nāgaur district and in small quantities in Phalodi and Bārmer. It is used as cement to fill the joints in stone-masonry, and at Nāgaur and in its vicinity, where it is both cheap and plentiful, it almost replaces lime as a cementing material; its use is, however, confined to the interior of houses as it will not stand heavy rain. The process of quarrying is very simple; the workmen go down the slanting pits, dig out the mineral and bring it in baskets to the surface. About thirty men, mostly of the Beldār caste, are thus employed daily, and the yearly output averages between five and six thousand tons. Selenite crystals of similar origin to gypsum have been found recently in the *kankar* near the base of the silt in the Sāmbhar lake, and are said to be plentiful in Pachbhadra and near Khinwal in the south-east.

Fullers' earth.

Beds of fullers' earth (called *mitti* or *Multāni mitti*) exist in the Phalodi district and the vicinity of Bārmer, usually from five to eight feet below the surface. The clay is quarried in the ordinary way and is exported chiefly to the Deccan, Gujarāt and northern India, where it is often used for the manufacture of the better grades of pottery; locally, however, it is popular as a hair wash in virtue of its grease-absorbing properties.

Other minerals.

The remaining minerals need no lengthy notice. Granite abounds in the Arāvallis and the Jālor and Siwāna hills, but very little use is made of it; and serpentine exists at Ghānerao in the south-east and in the Parbatsar district in the north-east. Among more or less recent discoveries are veins of mica and asbestos in the Arāvalli hills in association with schists and porphyritic granites; fairly rich ores of iron in the Chappan-kā-pahār near Siwāna; crystals of calcite or Iceland spar near Sādri in the Desuri district, which were described as being too opaque to be of any value; talc near the village of Barr in Jaitāran; and steatite or soapstone in Parbatsar. No attempt has yet been made to work any of the above.

CHAPTER VII.

Arts and Manufactures; Commerce and Trade.

The organisation of Hindu society demands that certain necessary arts, such as those of the weaver, the potter, the oil-presser, the blacksmith, and the shoemaker, shall be practised in every village, but they are all rude handicrafts carried on with only a few tools of the most primitive type. The vast bulk of the population (nearly sixty-three per cent.) is supported by pasture and agriculture, and the non-agricultural element of the village community is insignificant, being as small as is consistent with the few and simple needs of the average cultivator; indeed, it exists for his benefit and is directly maintained from the produce of the village fields, so that all stand or fall alike with the harvest. Such petty village manufactures as exist are strangled or elbowed out by foreign competition, and the people are driven to an almost absolute dependence on the soil which cannot be adequately expressed in figures. ARTS AND MANUFACTURES.

Weaving is an important branch of the ordinary village industry, but beyond coarse cotton and woollen cloths, mostly made of locally produced fibre, hardly anything is attempted and factory life may be said to be non-existent; work in leather is also the occupation of a large class of people represented in every village, but it is of a rude kind. The dyeing and printing of cotton fabrics constitutes a highly specialised industry, and the dyers and printers still thrive in consequence of their ability to gratify the love of colour, or rather the well-designed combination of colours, so popular among either sex in Rājputāna. Other more or less important but struggling industries are represented by the brass and iron-founders of Jodhpur and Nāgaur, the goldsmiths, silversmiths and embroiderers of Nāgaur, the lacquerers of Bagri (in Sojat) and of Jodhpur and Nāgaur, and the ivory turners of Merta and Pāli. Turbans for men and scarves for women are dyed and prepared with much labour by Chadwās and Khattrīs, and an embroidered silk knotted thread for wearing on the turban (called *phūlmāla*) is also peculiar to Mārwār and is made by Oswāl Mahājans, those engaged in the work being styled Patwās (from *pat*, meaning silk). The *jamdanīs* or leathern boxes of Jodhpur, the guitar strings of Nāgaur, the felt cloaks and rugs and the *khaskhas* fans of Merta, the drinking-vessels of bell-metal of Jālor, the marble toys, cups and platters of Makrāna, the saddles and bridles of Sojat, and the millstones and camel-trappings of Bārmer are all noteworthy.

As regards large industries, the Darbār has its own ice and aërated water factory, which was established in 1886 and was for the first five years worked at an average annual net loss of Rs. 1,600, but has since yielded a yearly profit of about Rs. 5,000. A tannery started at Pāli

in 1897 at a capital cost of more than a lakh was always an unprofitable concern and was closed as a State institution in 1904, while the flour-mill erected at the capital in 1899 has been almost equally unsuccessful. There are five wool and cotton-presses in the State, namely two at Pāli and one each at Jodhpur, Lūni Junction and Merta Road, but they belong to private individuals, and nothing is known about their out-turn or working.

COMMERCE AND TRADE. Former trade.

The trade of Mārwār in olden days was considerable, the State forming the connecting link between the sea-coast and northern India. The chief mart was Pāli, where the productions of India, Kashmīr and China were exchanged for those of Europe, Africa, Persia and Arabia. Caravans from the ports of Cutch and Gujarāt brought ivory, copper, dates, gum arabic, borax, cocoanuts, broadcloths, silks, sandalwood, camphor, dyes, drugs, spices, coffee, etc., and took away chintzes, dried fruits, cumin-seed, assafœtida, sugar, opium, silks, muslins, shawls, dyed blankets, arms, potash and salt. The guardians of the merchandise were almost invariably Chārans, and the most desperate outlaw seldom dared to commit any outrage on caravans under the safeguard of these men, the bards of the Rājputs. If not strong enough to defend their convoy with sword and shield, they would threaten to kill themselves and would proceed by degrees from a mere gash in the flesh to a death-wound; or if one victim was insufficient, a number of women and children would be sacrificed, and the marauders declared responsible for their blood. Colonel Tod wrote thus about 1830:—"Commerce has been almost extinguished within these last twenty years, and, paradoxical as it may appear, there was tenfold more activity and enterprise in the midst of that predatory warfare, which rendered India one wide arena of conflict, than in these days of universal pacification. The torpedo touch of monopoly has had more effect on the caravans than the spear of the desert Sahrai or outlawed Rājput; against its benumbing qualities the Chāran's dagger would fall innocuous; it sheds no blood, but it dries up its channels." In giving the yearly revenue from customs-duties as Rs. 4,30,000, Tod observed that the figure was taken from ancient records and represented the sum realised in the "good old times" rather than that collected in his day, which was considerably less.

Growth of trade.

Up to 1882 trade was much hampered by the system of levying transit-duty and various vexatious cesses such as *rāhdāri*, *māpa*, *dalāli*, *chungi*, *tolai*, etc., and the average annual income from these sources and from import and export-duties amounted at that time to Rs. 4,61,000. In 1882-83 the Customs department was reorganised and a universal tariff, based on the principle of reducing duty on necessaries and enhancing it on luxuries, was introduced; moreover, all the harassing imposts enumerated above were swept away except import, export and transit-duties, and of these, the last were entirely abolished in 1891 save on opium and intoxicating drugs. Since 1883 the tariff has been revised from time to time with the object not only of increasing the revenue but of giving every possible impetus to trade and convenience to the public. The result has been that during the last

twenty years the annual receipts have averaged about eleven lakhs; the actual figures for 1905-06 were:—receipts Rs. 10,42,714; expenditure Rs. 1,43,243; and net revenue Rs. 8,99,471.

General character of trade.

The trade is at present mostly made up of the export of animals, cotton, hides, oil-seeds, wool, bones, salt, marble, sandstone and mill-stones, and the import of sugar, opium, *gur*, rice, dry fruits, metals, wheat, barley, maize, gram, oil, tobacco, timber and piece-goods.

Exports.

Of the exports, animals—especially he-goats and male sheep—are sent to Bombay, Gujarāt and Deesa, buffaloes, bullocks and cows to Jaipur and other neighbouring territories, and camels to Sind; cotton to Bombay and Beāwar; hides, dressed and undressed, to Bombay; oil-seeds to Bombay, Ahmadābād and Beāwar; wool to Bombay and Fāzilka (in the Punjab); bones to Bombay and Karāchi; salt and marble (including marble toys and utensils) to different parts of India; and sandstone and millstones to adjacent States or districts.

Imports.

The imports are generally from the following places:—sugar from Bareilly, Cawnpore, Chandausi and Muzaffarnagar; opium from Kotah and Mewār; *gur* from Bareilly, Hāthras and Mewār; rice from Chandausi and Sind; dry fruits from Bombay, Broach and Ahmadābād; metals, kerosene oil, timber and ivory from Bombay; tobacco from Pānipat, Mālwā and Nadiā; piece-goods from Ahmadābād, Bombay, Calcutta and Delhi; *mahuā* flowers from Sirohi; and wheat, barley, maize and gram from Sind, the Punjab and the Bombay Presidency.

Trading centres, etc.

The chief centres of trade are Bālotra, Bārmer, Jaitāran, Jodhpur, Kuchāwan, Merta, Mūndwa, Nāgaur, Nāwa, Pāli, Pīpār, Rāni and Sojat; and the trading classes are mostly Mahājans, Bohrās and Brāhmans, very few of them being wholesale dealers. The two most important exports of this State are animals and wool, and while the collecting and distributing agencies for the former are the Parbatsar and Tilwāra fairs mentioned in Chapter IV above, those for the latter are the presses referred to on page 118 *supra*. It has been estimated that about eighty per cent. of the exports and imports are carried by rail, and the rest by camels, carts, bullocks and donkeys, chiefly the first named.

CHAPTER VIII.

COMMUNICATIONS.

Railways.

The railways traversing the State are the Rājputāna-Mālwā and the Jodhpur-Bīkaner, both of which are on the metre gauge (3' 3⅜"). The total length of line has increased from 129 miles in *1881*, 376 in *1891*, and 584 in *1901* to 593 in *1905* and at the present time (1907). There are thus nearly fifty-nine square miles of country to every mile of railway. The districts in no way served are Dīdwāna and Mārot in the north-east, Phalodi in the north-west, Sānkra, Sheo and Shergarh in the west, and Jālor, Jaswantpura and Sānchor in the south.

The Rājputāna-Mālwā line.

The Rājputāna-Mālwā Railway, the older line of the two, belongs to the Government of India and has a length within Jodhpur limits of about 129 miles with twenty stations. The main line (Delhi-Ahmadābād) enters the State near Barr in the east and leaves it a little below Nāna in the south-east; this section was opened for traffic in 1879-80, is about 114 miles long, and its most important station is Mārwār Junction (locally called Khārchi). From Sāmbhar (a town held jointly by the Jodhpur and Jaipur Darbārs) a branch, opened some four years before the section just mentioned, runs for fifteen miles across the salt-lake and past Nāwa to Kuchāwan Road Junction. The entire Rājputāna-Mālwā system was leased by Government in 1885 to the Bombay, Baroda and Central India Railway Company; the contract terminated at the end of 1905, but the working has again been entrusted to it under new conditions.

The Jodhpur-Bīkaner line.

The Jodhpur-Bīkaner line is mainly the property of these two States, only a small section being owned by the Government of India; it has been constructed gradually since 1881 and is worked by a special staff employed by the Darbārs. The mileage has increased from 19 in *1882*, 44 in *1884*, 64 in *1885*, 124 in *1887*, 291 in *1891*, 364 in *1893*, 609 in *1900*, and 824 in *1902* to 833 in *1905*, since when there has been no change. Of the existing length, 463·89 miles belong to Jodhpur, 245·35 to Bīkaner (including 22·05 miles in the Punjab and 11·30 in Patiāla), and 123·98 (in Sind) to Government. The total capital outlay to the end of 1906 was rather more than 216 lakhs, and in the year last mentioned the net earnings amounted to 22·1 lakhs or a profit of about ten per cent. The line runs north-west from Mārwār Junction to Lūni Junction (whence there is a branch almost due west which joins the North Western Railway at Hyderābād in Sind) and then continues generally north by north-east past Jodhpur, Merta Road and Bīkaner to Bhatinda in the Punjab. From Merta Road there are two branches, one connecting the town of Merta with the station and only nine miles in length, and the other running east by north-east to Kuchāwan Road.

In the preceding paragraph the Jodhpur-Bīkaner Railway as a whole has been dealt with, and we may now consider the portion thereof belonging to the Mārwār Darbār which, in such matters, has given the lead to all the other States of Rājputāna. The first section, from Mārwār Junction to Pāli (nineteen miles), was opened in July 1882, and was carried on to the Lūni river (twenty-five miles) by June 1884 and to Jodhpur city (twenty miles) by March 1885. Then followed the branch from Lūni Junction to Bālotra and Pachbhadra (sixty miles) in March 1887; the extensions from Jodhpur to Merta Road (sixty-four miles) in April 1891, from Merta Road to Nāgaur (thirty-five miles) in October 1891, and from Nāgaur to the Bīkaner border (about twenty-four miles) in December 1891. The branch from Merta Road to Kuchāwan Road (seventy-three miles) was opened in March 1893, while the extension of the Bālotra section westwards to the Sind border (nearly 135 miles) was completed by December 1900; since then, the only addition has been the branch (nine miles) linking the town of Merta with Merta Road in January 1905. The total length of the line within Jodhpur limits is accordingly 463·89 miles, and the capital outlay to the end of 1906 was 122·7 lakhs. The mean percentage of net earnings on capital outlay from the commencement of operations to the end of 1906 has been 7·74, with a minimum of 3·92 per cent. in 1884 and a maximum of 11·40 in 1896. In 1906 the gross working expenses were Rs. 8,67,837, the gross earnings Rs. 20,91,368, and the net receipts Rs. 12,23,531, or a profit of 9·97 per cent. on the capital outlay. Further details are given in Table No. XXVI in Vol. III-B.

Projected railways. Of projected railways, that known as the Bāran-Ajmer-Mārwār would pass through about twenty-one miles of the eastern portion of the State; the earthwork, of which thirteen miles were constructed by famine labour in 1899-1900, has been estimated to cost approximately 3·3 lakhs. Another project, which the Jodhpur and Bīkaner Darbārs are prepared to carry out at once, has just been sanctioned by the Secretary of State. The line is to start from Degāna—a station forty-six miles west of Kuchāwan Road on the Jodhpur-Bīkaner Railway—and run first north past the towns of Dīdwāna and Lādnun (in Jodhpur) and Sūjāngarh (in Bīkaner), and then north-east past Ratangarh, Churu and Rājgarh (all of Bīkaner) to Hissār on the Bhatinda section of the Rājputāna-Mālwā Railway. The total length will be 190 miles, namely 60 in this State, 101 in Bīkaner and 29 in British territory, and the cost of construction has been roughly estimated at between Rs. 16,000 and Rs. 19,000 per mile, inclusive of rolling-stock.

Influence of railways. It would be difficult to over-estimate the benefits which the two existing railways (particularly the Jodhpur-Bīkaner line) have conferred on the people, especially during periods of famine; without them, many hundreds of persons and cattle would have perished in 1899-1900. They have both levelled and steadied prices, prevented local distress from disorganising rural economy, and stimulated the cultivation of marketable produce. As for the influence which they

have exercised on the habits of the people, it may be said that they have a tendency to slightly relax the observance of caste restrictions and to introduce a good deal of Hindustānī and a sprinkling of English words into every-day use, while in the districts on the western border it has been noticed that the rail-borne Sind rice is to some extent replacing *bājra* as a staple food-stuff.

Roads.

The length of metalled roads increased from 21½ miles in *1891* and 46 in *1901* to 47½ at the present time, and of unmetalled from 105½ miles in *1891* to 108 in *1901* and in *1906*. All are maintained by the Darbār at an average annual cost of about Rs. *12,000*. With the exception of two short roads connecting the towns of Nāgaur and Pāli with their respective railway stations, all the metalled communications are to be found in or near the capital, and they are kept in good repair. The trunk-road from Agra to Ahmadābād runs for ninety-six miles through the State, from near Sendra (in Merwāra) to the Mārwār-Sirohi border close to Erinpura; it was constructed between 1869 and 1875 at a cost of nearly five lakhs (towards which the Government of India contributed Rs. 83,728), and was originally metalled, but it has been superseded by the railway and is now merely a fair-weather communication.

Tramways.

A light tramway of two-feet gauge, laid down in 1896 between Jodhpur railway station and the city, the cars being drawn by bullocks, has proved of great convenience to the public, and has considerably reduced the cost of carriage of grain and other commodities. The length of the line, including the extension to the suburb of Mahāmandir which was carried out in 1899, is now 3¼ miles, and the net earnings average about Rs. 2,000 yearly or nine per cent. on the capital outlay. The State has also its conservancy tramway, worked partly by buffaloes and partly by steam-power; this is noticed in Chapter XV *infra*.

Conveyances.

The country carts are of very primitive design. The rims of the wheels are made of thick pieces of wood, placed concentrically in two rows and connected with the nave by means of wooden spokes from four to six inches long, and are seldom tyred; the wheels turn on slender iron rods projecting from the ends of a massive horseshoe-shaped frame of wood and serving as axles. Supported on this frame is a board made up either by piecing together strips of timber or by inserting slices of bamboo; the board is not level, but rises gently from the front towards the middle (which is usually over the highest part of the wheel) and slopes considerably at the other end so as to facilitate loading. Connected with the frame is the shaft which generally consists of several bars of wood fastened tightly together, and at the end of the shaft is the yoke. These carts, which cost about Rs. 50 each, are convertible into fairly respectable looking conveyances for the well-to-do by fixing a *chārpāi* or bedstead on to the board and throwing a canopy of matting or cloth over the same, shaped like a dome (or two domes, one behind the other) and supported on slender wooden poles. The use of springed and tyred conveyances is practically confined to the capital, where only a few

of the richer inhabitants own either locally built or imported carriages, and the appointments thereof are usually rather of a durable than a comfortable or elegant character. Throughout the districts the popular mode of conveyance is the camel.

Post and telegraph offices. The State is included in the Rājputāna postal circle which is in the charge of a Deputy Postmaster-General with headquarters at Ajmer. The Darbār adopted Imperial postal unity in 1885, and there are now ninety-six Government post offices and five telegraph offices in Mārwār (see Table No. XXVII), in addition to the telegraph offices at the numerous railway stations. The mails are conveyed over a total length of 172 miles by camels and 548 miles by runners, the State providing the necessary escorts.

CHAPTER IX.

FAMINES.

The country falls within the area of constant drought and is liable to frequent famines or years of scarcity. Colonel Tod has called famine "the grand natural disease" of the western regions, and the local proverb, which warns us to expect "one lean year in three, one famine year in eight," has proved very true, for since 1792 the State has been visited by at least sixteen famines.

Causes and general conditions.

The chief cause is the failure of the monsoon; adverse weather conditions such as hail and frost, or visitations of locusts, have frequently done much damage, but they seldom cause more than a partial failure of crops, and this failure is usually confined to certain districts. From the famine point of view, Mārwār may be divided into three groups. The first comprises the *hukūmats* of Bāli, Bilāra, Desuri, Jaitāran, Jālor, Jaswantpura, Mārot, Merta, Pāli, Siwāna, Sojat and part of Sāmbhar, which either border on the Arāvallis or lie within the basin of the Lūni river and its tributaries; these tracts are comparatively rich and, in a normal year, yield both *rabi* and *kharīf* crops. They are not so entirely dependent on the rains as the western districts because they possess numerous wells which produce wet crops sufficient for the maintenance of the people, even if the rains fail; the chief difficulty in times of drought is the maintenance of cattle as fodder cannot be grown on a large scale by well irrigation. The rest of the State is mostly a sandy tract dependent on the rainfall, but even here there is a belt of land which is specially liable to famine and forms the second of our groups; it consists of the districts of Mallāni, Pachbhadra, Phalodi, part of Sānchor, and Sānkra, Sheo, and Shergarh, situated in the western half of the territory. The causes which aggravate its famine tendency are:—(i) the absence of forests and of any perennial river; (ii) its peculiar position, favouring the approach of neither of the monsoons; and (iii) the depth of water from the surface, which exceeds the practical limit of well irrigation. The Lūni occasionally overflows in Sānchor, leaving an alluvial deposit *(rel)* on which good crops of wheat are grown, while elsewhere there are certain depressions which yield wheat when the rainfall has been heavy. The other districts constitute the third group and occupy an intermediate position.

Warnings.

When the rains fail, the premonitory symptoms of distress are a rise in prices; a contraction of charity on the part of the less wealthy or its expansion in the case of the more moneyed; a diminution of credit and a consequent enhancement of the rate of interest on loans; a feverish activity in the grain trade; an increase in petty

crime; and an unusual stream of emigration of the people accompanied by their flocks and herds.

Famines may be classified thus according to their intensity:—*ankāl* or grain famine; *jalkāl* or scarcity of water; *tinkāl* or fodder famine; and *trikāl*, when grain, water and fodder are all scarce.

Early famines.

Of the famines which occurred prior to 1868 there is hardly any record save tradition, but the State is known to have been afflicted in 1792, 1804, 1812-13, 1833-34, 1837-38, 1848-49, 1850 and 1853-54. Of these visitations, that of 1812-13 was the most calamitous as the crops failed completely and there was great scarcity of water; the price of grain rose to three seers per rupee, and the mortality among human beings was appalling. Grass was, however, fairly abundant, and the herds generally were saved.

Famine of 1868-69.

In 1868 a little rain fell in June and July but, with the exception of a couple of storms in the south on the 1st and 2nd of September, none was received subsequently, and the entire State was affected. It was reported at the time that on no former occasion had such a failure of grain and forage been simultaneous; indeed, the latter was so scarce in some places that, while the price of wheat was six, that of grass was 5½ seers per rupee, and as regards water, many of the poor at the capital were able to earn a livelihood by bringing it in and selling it at from 1½ to 2½ annas for a *gharā* or earthen pot. The people left in enormous numbers with their flocks and herds for Gujarāt and Mālwā, but, as these territories were themselves in distress, the emigrants became aimless wanderers and died in thousands; most of the survivors returned in May 1869 in the belief that the rains would be early, but the monsoon did not break till the 19th July and there was no rain in Jodhpur itself till the 9th September. A second time they rushed away, but cholera broke out among them and they fell an easy prey. When the rains set in, agricultural operations were started and, owing to want of cattle, small ploughs were made and the men yoked themselves thereto in place of oxen, while the women dropped in the seed. About half of the usual area of land was sown and the harvest was promising well when swarms of locusts appeared and destroyed seventy-five per cent. of it. The grass crop of 1869 was, however, luxuriant, and the species known as *bharūt* yielded a large quantity of seed which was as valuable in Mārwār as the manna of old to the Israelites. To crown all, the heavy rains of September and October were followed by a virulent outbreak of fever to which about one-fifth of the entire population is said to have succumbed.

The import duty on grain was abolished and food was distributed at various places by some of the Rānīs, Thākurs and wealthy inhabitants, but the Mahārājā, beyond placing a lakh of rupees at the disposal of the Public Works department in 1869, did nothing. The highest recorded price of wheat was 3¾ seers per rupee at Jodhpur city, but even here and at Pāli (the two principal marts) no grain was to be had for days together. It was estimated that from cholera, fever and starvation the State lost one-third of its population, and

the mortality among cattle was put at no less than eighty-five per cent. The horses of the cavalry detachment at Mallāni were let loose to take their chance of life by feeding on the grass-roots beneath the sand, and the official in charge of that district was quite unable to procure fodder for his sole horse which he unsucessfully offered for sale at one-eighth of its value. In the same locality, the rate of hire of a camel for ploughing purposes was Rs. 3 a day, and of a pair of bullocks Rs. 4.

In 1871-72 the *kharīf* crops entirely failed in certain districts, and in the following year were much injured by locusts. One flight of these animals was described as being four miles in length by one hundred feet in depth, and as taking four hours to cross a road.

Famine of 1877-78.

The next great famine was in 1877-78, when the rainfall was but $4\frac{1}{2}$ inches and the *kharīf* crops yielded one-fourth and the *rabi* one-fifth of the usual out-turn; grass was also very scarce. Large numbers emigrated with their cattle, and the Darbār arranged to bring the majority back at its own expense, but it was estimated that 20,000 persons and 80,000 head of cattle were lost, and this bad season cost the State about ten lakhs.

Famine of 1891-92.

The year 1891-92 was one of triple famine—grain, water and fodder—and is further noticeable as having been the first occasion on which the provisions of the Famine Code for Native States were, with certain deviations, carried out in practice. The rainfall ($8\frac{3}{4}$ inches) was untimely and badly distributed, and the distress was most acute in Mallāni, Pachbhadra, Phalodi, Sānchor, Shergarh, Siwāna and part of Jodhpur, while curiously the desert districts of Sānkra and Sheo received an unusual fall of rain and escaped. Nearly 200,000 persons emigrated with about 662,000 cattle, and only sixty-three per cent. of the former and fifty-eight per cent. of the latter were said to have returned. When distress appeared, two large and important public works, namely, the earthwork of the railway and the embankment of the Jaswant Sāgar, happened to be in progress, and they were utilised to the utmost extent found possible; in addition, the people were employed in clearing the railway line near Bālotra of drifted sand, and several petty works, intended mostly for irrigation or water-supply, were started at different times from May 1891 as occasion required. The daily average number of labourers employed varied from 379 to 8,354, and altogether about 849,000 units* were relieved on works at a cost of Rs. 84,347. Poor-houses were established at the capital and the headquarters of the affected districts, and 23,500 units received full meals of cooked food; there was also the usual volume of private charity. The direct expenditure, including wages paid on ordinary public works, exceeded $5\frac{1}{2}$ lakhs, while remissions of land revenue and suspensions of tribute, etc. due from *jāgīrdārs* amounted respectively to about 2·8 and 1·6 lakhs. Cholera appeared in March 1892 and lasted till late in September, claiming nearly 8,500 victims, and it was closely followed

*A "unit" means one person relieved for one day.

by malarial fever which carried off a large number of people, chiefly children. The Jodhpur-Bīkaner Railway proved a great boon, bringing in about fourteen times as much grain as in ordinary years and large quantities of grass; the average prices of food-stuffs in seers per rupee were:—wheat ten to eleven, barley thirteen to fifteen, *bājra* eleven to thirteen, and *jowār* twelve to fourteen, or from two to three seers higher than the average of the previous three years.

Famine of 1899-1900.

A succession of bad seasons, commencing from 1895-96, culminated in the terrible famine of 1899-1900. At the capital less than an inch of rain fell in 1899 (forty-three cents in June and fifty-three in September), while two of the western districts, Sānkra and Sheo, received but fourteen cents each. The result was that the *kharīf* crops were entirely lost, there were no *rabi* sowings, and grass was to be found only in small quantities at the base of the Arāvallis. Emigration with cattle began in August, but it was long before the people realised that Mālwā, where salvation is usually to be found, was equally afflicted by drought. Some thousands were railed back to relief works in Jodhpur at the expense of the Darbār, and thousands more returned by road, after losing their cattle and selling all their household possessions; the mortality among the latter was grievously heavy. Relief measures were started on a scale never before attempted in the autumn of 1899 and were continued till September 1900; during this period about thirty million units were relieved at a total cost of 29·3 lakhs and, in addition, nearly 9¾ lakhs of land revenue, or about ninety per cent. of the demand, were remitted. The forests were thrown open to unrestricted grazing by horned cattle, and the people were allowed to collect, free of charge, grass, fodder, leaves, and all edible or saleable roots and fruits, as well as the bark of certain trees; the value of these concessions was estimated at about Rs. 21,000.

The relief works were divided into two classes, the first consisting of large projects under the Public Works department and the second of petty works under civil agency. On the former, which were by far the more important, the labourers were divided into gangs and given set tasks, while the civil agency works were at first carried out on the contract system, but, as distress deepened, the authorities had to resort to individual tasks. The daily average number of persons employed on relief works from December 1899 until the monsoon broke in July 1900 was about 89,000, the high-water mark being reached on the 10th March 1900 when a total of 123,691 was recorded. Gratuitous relief took the form of kitchens (usually as adjuncts to relief works), poor-houses, orphanages, and a chain of collecting camps necessitated by the geographical position of Mārwār and the nomadic tendencies of the people; cash advances were given to the police and various *jāgīrdārs* to enable them to supply starving wanderers with food, and *pardā-nashīn* women and others, whom neither their own feelings nor popular opinion would allow to work in public, were relieved by doles of grain conveyed through respectable agents. In addition to these measures, the

agriculturists were assisted with loans for the purchase of seed and cattle; bullocks and hand-ploughs were distributed, and private charity was very conspicuous.

Thanks to the two railways, prices remained fairly steady, the highest quotations having been wheat $6\frac{3}{4}$ seers, *bājra* and *jowār* about 8 seers, and barley $9\frac{1}{4}$ seers per rupee. There was, however, no fodder crop worthy of the name, and for some time grass was nearly as dear as grain; the mortality among the cattle was very great and was estimated at nearly a million and a half. The census of 1901 shows that deaths among human beings must have been very numerous, but it is impossible to say what proportion was due to the famine and what to other causes; it should, however, be remembered (i) that the people who returned from Central India at the beginning of the cold weather of 1899 brought back smallpox with them, and the disease spread all over the State; (ii) that cholera broke out in December 1899 and, though persistently kept in check, was not thoroughly eradicated till September 1900; and (iii) that the last four months of 1900 were marked by an exceedingly virulent outbreak of fever, which is said to have caused more deaths than want of food in the period during which famine conditions prevailed. Of the relief measures generally, it may be said that the Darbār fully recognised its responsibilities to its subjects and adopted a generous policy from the outset. No State embarked on the campaign with greater physical disadvantages to overcome or more crippled resources, and the results described in the exhaustive and valuable report written by its Famine Secretary could have been achieved only by exertions of which any administration might justly feel proud.

Scarcity of 1901-02.

The crops harvested in the autumn of 1900 and in the succeeding spring were good, but the monsoon of 1901 was weak and ceased early, and there was scarcity over about 17,000 square miles, chiefly in the western half of the State; locusts also caused considerable damage. Relief works, started in November 1901 and closed in October 1902, gave employment to nearly 445,000 units, while about 242,000 units were fed in poor-houses. The direct expenditure was Rs. 54,635, and remissions and suspensions of land revenue amounted respectively to 5·6 and 1·6 lakhs in round numbers.

Scarcities of 1904-05 and 1905-06.

In 1904 the rainfall was generally scanty and badly distributed, and the result was a partial failure of the *kharīf* crops in nine districts, particularly in Sānkra and Sheo. Prices, however, remained steady and low, and the relief works and poor-houses at no time attracted any large number of people. The occurrence of frosts in the abnormally severe and prolonged winter of 1904-05, followed by an almost complete failure of the south-west monsoon in 1905, caused considerable distress among the agriculturists and anxiety to the Darbār, but a crisis was happily averted by a cyclonic storm which passed over the State in September 1905 and by fairly good rain in the following February. Still an area of approximately 7,400 square miles, comprising the districts of Jodhpur, Nāgaur, Pachbhadra, Phalodi, Sānkra, Sheo and Shergarh, together with parts of Mallāni

and Pāli, was affected, and the usual measures of relief were instituted. Altogether 1,691,788 units were relieved either on works or gratuitously, namely nearly seventy-six per cent. by the Darbār, seventeen by private individuals, and the rest by *jāgīrdārs*. The expenditure by the Darbār, including some Rs. 41,600 advanced to cultivators, Thākurs and others, exceeded 1·8 lakhs, and if to this we add remissions of land revenue (5·73 lakhs) and losses under customs and certain other heads (about Rs. 87,000), the visitation may be said to have cost the State about 8·4 lakhs. On the other hand, there was an increase of nearly Rs. 1,50,000 in railway receipts, which may be directly ascribed to the scarcity, and if this be taken into consideration, the loss to the State would fall to approximately seven lakhs.

Protective measures. The chief steps taken to protect Mārwār against the extreme effects of drought have been the opening up of the country by means of railways; the construction of wells and tanks for the storage of water; the establishment of fuel and fodder reserves; and the conservation of the forests. The greatest safeguard, however, consists in the migratory habits of the people. A local proverb runs somewhat to the following effect:—

"August's here; no sound of thunder;
Sky is clear and weather fine;
Wife! 'tis time for us to sunder,
You to your folk, I to mine."

Indeed, the traditional custom of the inhabitants is to leave with their flocks and herds on the first sign of scarcity, before the grass withers and the scanty sources of water-supply dry up. Emigration has no terrors for the Mārwārī ryot, but is looked on by him as one of the ordinary incidents of his life; moreover, many of them migrate annually during the comparatively rainless winter months and find work in the rich valleys of the Indus or the opium fields of Kotah and Mālwā.

CHAPTER X.

ADMINISTRATION.

Form of government.

The State is ordinarily governed by the Mahārājā with the assistance of the *Mahakma khās* (a special department consisting of two members) and a consultative Council (now comprising five members, four of whom are Thākurs or nobles). The degree of control exercised by the Political Officer accredited to Jodhpur varies with the limits placed on the chief's ruling powers; under existing conditions the Resident takes an active part in the guidance of the administration, subject to the control of the Governor General's Agent in Rājputāna.

Subordinate to the *Mahakma khās* are a number of departments with a separate officer at the head of each. Among them may be mentioned the Manager of the Railway, the State Engineer, and the Auditor of accounts, all of whom are European officers; the Inspector-General of Police; and the Superintendents of the Customs, Excise *(ābkāri,)* Forests, Land Revenue *(hawāla)* and Stamp and Registration departments.

Administrative divisions.

For administrative purposes the territory is divided into twenty-three districts or *hukūmats*, each under an officer styled *Hākim*. In Mallāni, however, there is, in consequence of its peculiar tenure, size and recent restoration to the Darbār, an official termed Superintendent, while the north-eastern districts have also a Superintendent to dispose of border cases under the extradition agreement entered into with the Bīkaner and Jaipur Darbārs.

Mārwār-Merwāra.

Mention may here be made of the tract known as Mārwār-Merwāra, which is remarkable from the fact that, while the Government of India exercises full and permanent administrative control, the Jodhpur Darbār retains its sovereign rights therein. The District of Merwāra was subdued between 1819 and 1821 by a British force aided, to some extent, by Jodhpur and Udaipur troops, and both these States put forward claims to share in the conquered territory. Accordingly two *parganas* (Chāng and Kot Kirāna) were allotted to Jodhpur, three to Udaipur, and the remaining four were retained by the British Government. Of the Jodhpur villages, some were made over to the Darbār aud placed under the adjoining Thākurs, and others were managed by the Superintendent of Ajmer; but while the latter were kept under control, disorder reigned in the former. The divided jurisdiction gave criminals an asylum, and it was soon found that the dual form of government was worse than ineffectual. Eventually, in 1824, the Jodhpur Darbār handed over twenty-one villages to be managed by the British Government for a period of eight years, on the condition that it received the net revenue derived therefrom, and further agreed to pay Rs. 15,000 a year towards the expenses of

the local corps (the Merwāra Battalion) which had just been raised to preserve order. The engagement was renewed in 1835 for nine years, and seven additional villages were placed under British administration. On the expiry of this lease, the Mahārājā resumed the seven villages, but expressed his readiness to leave the remainder under management for such time as might suit the convenience of Government; no definite arrangements were, however, made, and matters remained on this unsatisfactory footing until 1885, when the late chief agreed to leave Mārwār-Merwāra to the permanent occupation and full administrative control of the Government of India, *subject to the following conditions, namely :—(i) that the sovereign rights of the Jodhpur State over the tract were fully recognised*; (ii) that the State should receive from Government a sum of Rs. 3,000 a year without regard to the amount actually realised from the villages by Government; and (iii) that, if ever a net profit should be derived from the villages by Government, the State should receive forty per cent. of it. These stipulations were accepted by the Government of India, and the new arrangement came into force on the 1st April 1885.

CHAPTER XI.

LEGISLATION AND JUSTICE.

Administration of justice in former times.

Before the close of the eighteenth century, in consequence of external invasions and internal disorders, the form of government in Mārwār was so unsettled that there was, properly speaking, neither any written law emanating from the head of the State nor any system of permanent and regularly constituted courts of justice. In some cases the people settled their disputes as best they could, and the principle of might being right usually determined the issue; in others the assistance of the village *panchāyat* was called in, or resort was had to one of the different forms of trial by ordeal; and in other cases, again, the matter would be taken before the *Hākim* who, being rather an executive than a judicial officer, was, in the districts, only a despot in little. Appeals against the decisions of the *Hākim* lay to the *Dīwān* who was, at the capital, what his subordinate was in the district, and there was consequently a virtual negation of justice, the only check on which seemed to be the fear of a scandal reaching the ears of the chief to whom, it should be remembered, it was often difficult to obtain access.

Some of the rulers, such as Bakht Singh, took such a keen interest in these matters that their judgments have become traditions and are said to be cited, even at the present day, as models of the sort of work a judge should do, but such instances were, like the oases in a desert, few and far between. Colonel Tod, describing the Mārwār of his time (1818—22), wrote that since the death of Mahārājā Bijai Singh (1793) "the judgment-seat had been vacant" and that "the administration of justice was very lax in these communities," capital punishments being rarely awarded, and the common sentences in cases of murder being fine, corporal punishment, imprisonment, confiscation of property or banishment; on the other hand, political offences were very summarily dealt with, and the whole power of the government was concentrated to punish them.

State of affairs in 1839-40.

The appointment of a British Political Agent in 1839 led to the establishment of certain courts at the capital and in the districts. We learn from a letter written by Captain Ludlow to the Governor General's Agent in the following year that ordinary cases at the capital were tried by a bench of four judges who, "having reported the issue to the Mahārājā, acted according to the instructions they received," while, for the disposal of serious cases, four persons (the *Dīwān*, the *Vakīl*, the *Bakhshī* and another official) were associated with them. Cases in towns were determined by the *Kotwāl* the *Mushrif* (Munsif), the *Wāqa-navīs* and the *Ittilā-navīs* and in the districts justice was administered by the *Hākim*, the *Kārkun*, the *Mushrif*, the

Wāqa-navīs and the *Ittilā-navīs.* Appeals were allowed except in cases of a trivial nature, but the procedure in all these courts was very primitive. Thus it was laid down that "should a case be brought forward, the truth of which cannot be ascertained through the depositions of the witnesses and the statements of the plaintiff and defendant, and in which the wisdom of the judges is at fault, then, according to the custom of the Rāj, ordeal by immersion in water is to be resorted to." Again, "should the offender be of a class who can be committed to prison, he will be placed in confinement by the *Kotwāl* ; but should he be of a class upon whom fines are leviable, then they *(sic)* can exercise their privilege of immersement. Should the case be of an aggravated nature, the decision will be given according to the commands of the Mahārājā, who will determine the punishment to be inflicted." A few years later, a set of rules and regulations was passed, one clause of which enjoined the levying in cash, as court-fees, of one anna, two annas and four annas per rupee on the amount recovered by the creditor, according as the debt was of less than six, less than twelve, and more than twelve years' standing.

A beginning in the right direction was thus made, but for many years there was hardly any serious administration of justice, and this was due partly to the inefficiency and inattention of the courts themselves and partly to the turbulent spirit of the *jāgīrdārs.* Up to 1873 the proceedings of a case were not fully recorded, and no files or registers were kept ; even where crime was proved against an offender, the arm of the law would not reach him if he belonged to a privileged class or sought shelter in some temple or the village or city mansion of one of the great nobles. In *jāgīr* territory, the state of affairs was even worse, as the *jāgīrdārs* did very little themselves and resented any interference on the part of the Darbār.

Improvements effected since 1876.

These forces of internal disorder lingered till the seventies of the last century, when the late Mahārājā sought to remove them—(i) by suppressing crime with the aid of a strong police ; (ii) by instituting a vigorous board of control called the *Mahakma musāhibat* (now styled the *Mahakma khās*) ; (iii) by strengthening and reforming the administration of justice by the creation of fresh courts and the introduction of statutory laws ; and (iv) by bringing the powers of the leading nobles into harmony with the mechanism of the State law-courts, after a proper definition and classification of the same into three grades. With a view to supply the want of a tribunal strong enough to command the obedience of the *jāgīrdārs* to its decrees, the Court of Sardārs was brought into existence in 1882, and a special officer, whose services were lent by the Punjab Government, was placed in charge of it in 1883. Two Munsifs' courts were added in 1884 and 1886 to dispose of accumulated arrears and deal with a large number of suits resulting from the reduction of the limitation period from twenty to twelve years, while at the headquarters of certain circles or groups of districts were located a number of Superintendents' courts to check the work of the *Hākims* and to dispose of,

on the spot instead of at the capital, all cases beyond the powers of the latter.

This reorganisation was not confined to the creation of new tribunals but was accompanied by a systematic work of legislation which has resulted in an approximation of the entire judicial machinery to the regular Anglo-Indian model. The *Mahakma khās*, presided over by the Mahārājā, was both the Legislature and the High Court for Mārwār. Before making any attempt towards codification, it issued, from time to time, rules and regulations for the guidance of the subordinate courts, the most important of which was that (passed in 1874) prescribing a thirty years' limitation for monetary suits and changing the old rate of court-fees to one of one, two, three, and four annas per rupee on the amount recovered in execution of a decree, according as the original suit was brought within five, ten, fifteen, and thirty years respectively from the date of the bond or that of the last payment. This rule was amended a year later by reducing the period of limitation to twenty years.

Legislative enactments.

During 1885-86 the Civil Procedure Code, the Limitation, Evidence and Stamp Acts, and the Criminal Procedure Code were prepared and published, the first four coming into force in January 1886 and the last in March 1887; all are based on the similar enactments of British India, with such additions and alterations as seemed desirable in the light of local requirements.

Civil Procedure Code of 1886.

The Civil Procedure Code follows Act XIV of 1882; a few clauses have been omitted as unnecessary in Mārwār, while by way of additions there are, for example, the sections bearing on the disposal of suits by means of oath administered according to the agreement of the parties, the decision in such cases being declared to be non-appealable. Other differences are :—(i) monetary suits are to be instituted in the court within whose jurisdiction the plaintiff, and not the defendant, resides; and (ii) the subordinate courts cannot order the sale of immovable property of a defendant in satisfaction of a money decree against him, except with the previous sanction of the *Mahakma khās*.

Limitation and other Acts of 1886.

The Limitation, Evidence and Stamp Acts are not as elaborate as their prototypes. The period of limitation for suits in Mārwār is longer than that under the Indian Act, *e.g.* for pre-emption suits, two years; for monetary suits, twelve years; for those relating to the possession of immovable property, forty years; and for foreclosure and redemption suits, eighty years. Suits to recover money lent outside the State were till lately governed by the *lex loci contractus*, but the difficulty in determining such law led the Darbār (in 1902) to prescribe a three years' period of limitation. The local Stamp Act of 1886, as amended in 1889, is framed to meet the wants supplied by the British Court-fees Act of 1870 and the Stamp Act of 1879; the fees are, generally speaking, much lower than in British India. The old rule of collecting court-fees in cash on a graduated scale at the time of execution of a decree was repealed in 1883, when the system of levying such, in the shape of stamp paper, at 6¼ per cent.,

at the institution of the suit was introduced. This rule was embodied in the Acts of 1886 and 1889, but applies only to suits relating to money transactions, land and several other classes of suits being entertainable on an eight-anna stamp paper, and even this nominal sum is remitted in cases in which the *tāzīmi* Sardārs and other privileged persons are the plaintiffs. Paupers are allowed to sue on blank paper, but have to pay twenty-five per cent. (in cash) on the amount recovered at the time of execution of a decree passed in their favour. The stamp paper in use was of the impressed kind till April 1905, when one-anna adhesive stamps were introduced.

Criminal Procedure Code of 1887.

The Criminal Procedure Code is based on Act X of 1882, though there are a few important points of difference between the two. The local enactment contains no provisions for trial by jury or with the aid of assessors, nor did it provide for the appointment of a public prosecutor until 1903, when the defect was remedied. The schedule attached to this Code, similar in plan to Schedule II of Act X of 1882 but differing in details as regards both the enumeration of offences and the punishment provided, serves the purposes of a Penal Code—the ten years' imprisonment, with which the offence of killing a cow or a consecrated bullock is punishable, being characteristic of the true Hindu sentiment prevailing in the State.

Transfer of property.

In civil cases the courts follow the generally understood principles of Hindu law and local usages. There is no Transfer of Property Act, but the following forms of security, known as *ahiwāla*, *barskati* and *bhoglāva*, are by long-established custom recognised in the courts. In the first, the terms are rather indefinite, but the essence of the transaction is a promise made by the mortgagor to allow the mortgagee to recover his money out of the income accruing to him from the mortgaged property; and this promise has for its counterpart an express or implied engagement by the mortgagee to advance money required by the mortgagor to meet his own necessary expenses and to pay the State charges on the property. This is a weak form of security, as the only remedy open to the mortgagee is a suit for the recovery of the money he advanced by the attachment of the income arising from the mortgaged property, and the decree passed by the court is a simple money decree, which is generally executed, not by an auction of the mortgaged property, but by instalments realised out of its yield. A better and more convenient form is *barskati*, by which the mortgagor hands over the property to the mortgagee to hold in usufruct for a certain number of years in full payment of the debt, the property being restored to the owner at the end of the stipulated period. *Bhoglāva* is the ordinary form of usufructuary mortgage, in which the creditor is given possession of the property and appropriates its yield in lieu of interest, while the mortgagor recovers it on paying the principal in a lump sum.

Various courts.

The courts in the State may be grouped under three classes, namely (i) those deriving their authority from the Darbār; (ii) those established by the Governor General in Council; and (iii) others or

interstatal ; and we will deal with them in this order.

State courts. The State tribunals number altogether eighty-five, and consist of *(a)* forty-one courts presided over by officials employed by the Darbār, and *(b)* forty-four courts presided over by *jāgīrdārs* or their managers *(kāmdārs)*. To the first group belong the nine *hawāla* courts ; the twenty-three *hukūmat* courts ; the Jodhpur *kotwāli* ; the Mallāni *munsifī* ; the courts of the two Superintendents of circles ; the Civil Court *(Sadr Dīwāni)* ; the Criminal Court *(Sadr Faujdāri)*; the Appellate Court ; the Court of Sardārs ; and the *Mahakma khās*.

Of the *hawāla* courts, eight are presided over by the *darogās* of the like number of circles into which the State has been divided for land revenue purposes, namely Bāli, Bilāra, Dholera, Jālor, Jodhpur, Merta, Nāgaur and Nāwa. Each *darogā* deals with civil suits not exceeding Rs. 100 in value, provided that both parties thereto are inhabitants of the villages in his circle. The ninth court is that of the Superintendent ; it is located at the capital and disposes of appeals against the decisions of the *darogās*.

The *Hākims*, within their respective charges, try civil suits not exceeding Rs. 500 (or, with the permission of the Civil Court Rs. 1,000) in value, and in criminal cases can pass a sentence of imprisonment up to four months, fine up to Rs. 200, and whipping not exceeding six stripes. The Jaswantpura *Hākim* has been given powers in suits not exceeding Rs. 700 in value.

The jurisdiction of the Jodhpur *Kotwāl* is confined to the capital and its suburbs ; he has the same criminal powers as the ordinary *Hākim*, and can decide civil suits, the value of which does not exceed Rs. 1,000 (or, with the sanction of the Civil Court, Rs. 2,000).

To the Mallāni Munsif is entrusted the disposal of all cases relating to land situated in that extensive district. The Superintendent of Mallāni and the western *hukūmats* exercises, within Mallāni, an unlimited civil original jurisdiction and criminal powers up to two years' imprisonment and fine of Rs. 1,000, appeals against his decisions lying to the *Mahakma khās* ; in Sheo and Pachbhadra, on the other hand, his powers on the civil side are confined to the trial of suits not exceeding Rs. 1,000 in value, which in criminal cases he can punish with one year's imprisonment and Rs. 1,000 fine, appeals against his decisions being heard by the Civil or Criminal Court as the case may be. The Superintendent's sentences of one month's imprisonment or fine of Rs. 25 are final, and he also disposes of appeals from the orders of the *Hākim* and Munsif of Mallāni and of the *Hākims* of Sheo and Pachbhadra.

The Superintendent of the north-eastern districts (Dīdwāna, Mārot, Parbatsar and Sāmbhar) disposes of suits not exceeding Rs. 1,000 in value, and can, on the criminal side, pass a sentence of six months' imprisonment, fine of Rs. 500, and whipping up to twelve stripes. He also enjoys interstatal jurisdiction, *i.e.* he can deal with cases in which the tracks of persons guilty of having committed certain offences in Jodhpur territory are proved to terminate in either the Bīkaner or the Jaipur State.

The Civil Court at the capital (*Sadr Dīwāni Adālat*) hears appeals against the findings of the *Hākims* (save of Mallāni, Pachbhadra and Sheo), the *Kotwāl*, and the two Superintendents (except in Mallāni cases), and tries original suits not exceeding Rs. 5,000 (or, by order of the Appellate Court, Rs. 10,000) in value, with the exception of those in which either a Rājput *jāgīrdār* is concerned or a question of adoption is at issue. It further has an insolvency side for all except Rājput *jāgīrdārs*, and every person unable to pay the court-fees has to be certified as a pauper by this tribunal.

The Criminal Court (*Sadr Faujdāri Adālat*) consists of two tribunals, one presided over by a Magistrate and the other by an Assistant Magistrate. The former has both appellate and original powers; he hears appeals from the decisions of (i) the *Hākims* (except of Mallāni, Pachbhadra and Sheo), (ii) the *Kotwāl*, (iii) the two Superintendents (save in Mallāni cases), and (iv) the Assistant Magistrate; and, on the original side, he can punish with imprisonment not exceeding two years and fine up to Rs. 1,000, his sentence of imprisonment up to one month or fine up to Rs. 50, and his order in appeals of imprisonment up to three months and fine of Rs. 100 being usually final, though subject to revision by the *Mahakma khās*. The Assistant Magistrate ordinarily deals with offences punishable with imprisonment not exceeding six months and fine up to Rs. 100, but can, with the permission of the Magistrate, take up more important cases.

The Appellate Court hears appeals from the decisions of the Civil and Criminal Courts, tries original suits exceeding Rs. 5,000 in value and all adoption cases in which a Rājput *jāgīrdār* is not concerned, and can pass a sentence of imprisonment of ten years and fine of Rs. 5,000. Its orders confirming the decrees of the lower courts in civil cases, and its sentences not exceeding one year's imprisonment and Rs. 500 fine in criminal cases are usually non-appealable.

The Court of Sardārs has both original and appellate jurisdiction in all civil cases in which Rājput *jāgīrdārs* are concerned and, like the Criminal Court, consists of two tribunals, one under a Superintendent and the other under an Assistant Superintendent. The latter is in charge of the insolvency side, and is also authorised to try suits not exceeding Rs. 2,000 in value as well as miscellaneous cases. The Superintendent hears appeals against the orders of his Assistant and takes up all cases beyond his powers, but, in the trial of land or adoption suits to which a *tāzīmi* Sardār is a party, he acts in conjunction with a Thākur, nominated by the *Mahakma khās* as a joint judge of the court; and should this Thākur happen to be himself a party to the suit, another is appointed specially for the occasion.

The *Mahakma khās* exercise full powers of revision and control over all the subordinate courts, and is the highest judicial tribunal in the State, hearing appeals against the decisions of the Court of Sardārs, the Superintendent of the western districts (in Mallāni cases) and the various *jāgīrdārs'* courts. It is practically the final

court of appeal on both the civil and criminal sides, as its capital sentences and orders in important cases in which the *jāgīrdārs* are concerned alone require the confirmation of the Mahārājā.

The *jāgīrdārs'* courts are divided into three grades, namely—(*a*) those authorised to try civil suits not exceeding Rs. 1,000 in value and to pass a sentence of six months' imprisonment and Rs. 300 fine; (*b*) those possessing exactly half of these powers; and (*c*) those which can take up suits of a value not exceeding Rs. 300, and can punish with one month's imprisonment and fine up to Rs. 100. Appeals lie to the *Mahakma khās,* which also decides cases beyond the powers of any of these courts. The *jāgīrdārs* who possess powers are obliged to keep, as their assistants, persons trained in judicial work and approved by the *Mahakma khās*; the number of tribunals, and the powers exercised by them consequently vary from time to time, and at present there are twenty-six in the first, seven in the second, and eleven in the third grade.

British courts.

Turning now to courts established by the Governor General in Council, mention may first be made of those having jurisdiction in that portion of the State which is occupied by the Rājputāna-Mālwā Railway. On the short branch from Sāmbhar to Kuchāwan Road, most of the civil suits are disposed of by the Judicial Assistant Commissioner, Ajmer, (a Court of Small Causes), while the more important ones go before the Resident at Jaipur (a District Court). On the rest of the line, *i.e.* from near Sendra on the east to the Sirohi border in the south-east, all civil suits are decided by the Assistant Commissioner of Merwāra, who has the powers of a Court of Small Causes and a District Court. For the disposal of criminal cases there are the courts of the Superintendent and the Assistant Superintendent of the Railway Police—the former having first, and the latter second class magisterial powers; over them is the District Magistrate (the Resident at Jaipur for the Sāmbhar-Kuchāwan Road branch, and the Resident at Jodhpur for the rest of the line within Mārwār limits). The Commissioner of Ajmer is Sessions Judge for both of the above sections, and the Governor General's Agent in Rājputāna is High Court and Local Government for the entire line in the Province.

As regards lands occupied by the Jodhpur-Bīkaner Railway, the Mahārājā has agreed to cede to the British Government full criminal and civil jurisdiction over that portion situated in his territory, but has not yet been called on to do so; arrangements for taking it over are, however, now in progress.

Next come the courts established at the salt sources of Sāmbhar, Dīdwāna and Pachbhadra, the presiding officers of which are Assistant Commissioners of the Northern India Salt Revenue Department. The Judge of the Sāmbhar court has the powers of a first class magistrate, while the other two officers are second class magistrates. These powers are exercised within defined limits which, in the case of Sāmbhar and Dīdwāna, are for certain purposes deemed to be divisions of the Ajmer District; at Pachbhadra, however, the Resident at Jodhpur is both District Magistrate and Sessions Judge (no appeal lying

from any sentence or order passed by him in the former capacity), and the Agent to the Governor General is High Court.

Lastly, certain officers, being European British subjects, have been appointed Justices of the Peace, namely the Resident and the First Assistant to the Governor General's Agent for the entire State (committing accused persons for trial to the High Court at Bombay), and the Judge at Sāmbhar within the limits of the jurisdiction of that court (committing to the High Court at Allahābād).

Interstatal courts.

Of interstatal courts, that of the Superintendent of the north-eastern district has already been noticed; a similar tribunal for the disposal of border cases between Jodhpur and Jaisalmer is on its trial. There remains only the Mārwār Court of Vakīls, established about 1844 with the special object of securing justice to travellers and others who suffer injury in territories beyond the jurisdiction of their own chief, and deciding on all offences against person and property which cannot be dealt with by any one State. It is under the supervision of the Resident and is composed of the Vakīls in attendance on him; appeals against its decisions lie to the Upper Court of Vakīls at Abu, and sentences exceeding five years' imprisonment or awards for compensation exceeding Rs. 5,000 require the confirmation of the Upper Court. The average number of cases decided yearly by the Mārwār Court of Vakīls was 105 during the ten years ending 1890-91 and 47 during the succeeding decade; the actual figures for 1906-07 were 136. Appeals are rare, averaging about six or seven annually.

Registration.

The system of registration was introduced in 1899; the Act of that year made obligatory the registration of documents relating to immovable and movable property worth more than Rs. 500 and Rs. 400 respectively, but by the amending Act of 1902 these figures were reduced to Rs. 400 and Rs. 200 respectively. The total number of documents registered up to the 31st March 1906 was 9,328, the figures for individual years having been: 1,184; 954; 1,316; 1,407; 1,159; 1,477; and 1,831; or an annual average of 1,332. There are twenty-three offices, namely one at the capital (where more than half of the work is usually done) under the Registrar, and the rest at the headquarters of districts under the *Hākims* as sub-registrars. The value of the property involved in the 1,831 documents registered in 1905-06 was about 32·7 lakhs, and the fees realised amounted to Rs. 8,904. The *tāzīmi* Sardārs are also authorised to register documents relating to property, the value of which does not exceed the limit of their civil judicial powers, provided that both parties to the transaction reside within their jurisdiction.

CHAPTER XII.

FINANCE.

Revenue in former times.

Of the revenues of Mārwār in former times very little is known. In some old documents to which Colonel Tod had access they were given as about eighty lakhs a year, namely *khālsa* or fiscal nearly thirty lakhs and the income of the feudal and ministerial estates fifty lakhs; but, with reference to the above, Tod observed that "if they ever did reach this sum, which may be doubted, we do not err in affirming that they would now be overrated at half that amount." Captain Ludlow, the first Political Agent of Jodhpur, reported in 1840 that the ordinary *khālsa* revenue ranged between seventeen and nineteen lakhs a year, and in 1869-70 it was estimated at thirty lakhs.

Receipts and expenditure during recent years.

During the ten years ending 1900-01, the actual receipts from ordinary sources averaged 47·7 lakhs annually, and, if extraordinary receipts, such as loans from the Government of India and the Mysore Darbār, be added, the total would be 60·2 lakhs. The average yearly expenditure during the same period was:—ordinary 44·8 lakhs, extraordinary 14·9 lakhs, total 59·7 lakhs. At the present time the normal revenue may be put at about 56, and the ordinary expenditure at about 42 lakhs of rupees a year. The above figures represent only the fiscal receipts and disbursements, that is to say, the *khālsa* revenue and expenditure; the annual income of the *jāgīrdārs, ināmdārs* and others holding on privileged tenures has been roughly estimated at fifty lakhs, and consequently the gross annual revenue of the State may be said to be about 106 lakhs.

Chief sources of *khālsa* revenue.

The *khālsa* revenue is derived chiefly from five sources, namely (i) salt, including treaty payments, royalty, etc., nearly 15·3 lakhs; (ii) customs 10 to 11 lakhs; (iii) railway a similar amount; (iv) land revenue, including irrigation fees, 8 to 9 lakhs; and (v) tribute from *jāgīrdārs*, succession fees, etc., rather more than three lakhs. The main items of expenditure are: army, including police, about 9 lakhs; civil establishment 9 lakhs; Public Works department (ordinary) 5 to 6 lakhs; palace and household 3 lakhs; and tribute to Government (including payment for the Erinpura Regiment) nearly 2¼ lakhs.

Main items of expenditure.

Past and present methods of taxation.

Of the five principal sources of revenue mentioned above, the railway is of recent growth, and in comparing the present with past methods of taxation, (i) land revenue, (ii) salt, (iii) customs, and (iv) tribute and succession fees from *jāgīrdārs* need only be dealt with. Colonel Tod notices the same items, though sometimes under different names. The first was collected in kind, the produce being divided equally between the Darbār and the cultivator; the latter had also to remunerate the man told off to watch the crops, as well as

other officials who attended the process of division (*batai*), and in addition, certain cesses or taxes, such as *kharrā*, *ghasmāri*, etc., were levied. Salt was worked in a crude fashion under the supervision of the local officials, but nevertheless formed the most certain branch of income. The customs revenue was derived from transit, as well as from import and export duties; grain, whether of foreign importation or home-grown, was taxed, even though it was being transported from one part of the State to another. As for the fourth item (tribute and succession fees), there was no fixed standard to compute it, but feudal contingents were provided by the *jāgīrdārs* at the rate of one foot-soldier for every Rs. 500, and one horseman for every Rs. 1,000 of income. Besides the above, there was no limit to the extortionate demands of the chief or of the collectors, and when the land revenue and customs were, as was very often the case, leased out, the lessee proved a source of constant harassment to the poor *ryot*; the *jāgīrdārs*, too, had not infrequently to appeal to arms.

To Mahārājā Takht Singh is due the credit of systematising the valuation of *rekh* (tribute from the *jāgīrdārs*) and the succession fee called *hukmnāma*, and it was in his time (1870) that the Jodhpur portion of the Sāmbhar lake and the salt marts of Nāwa and Gūdha were leased to the British Government. In 1879, when Jaswant Singh was ruling, four other salt sources were leased in the same way and, shortly afterwards, the Darbār turned its attention to the reorganisation of the remaining departments. By 1883 a reformed customs tariff (which, with a few important modifications, is in force to this day) had been introduced; the main features were (i) the abolition of some of the transit-duties and a thousand and one petty *lāgs* (imposts), as also the duty on edible grains brought in for consumption; (ii) a reduction in the duties on the common necessaries of life; and (iii) an enhancement of those on articles of luxury. The land revenue department was next taken in hand. The *khālsa* area, which had been duly surveyed between 1883 and 1893 under the superintendence of the late Colonel Loch, was regularly assessed on the *bīghori* system between 1894 and 1896 by Rao Bahādur Pandit Sukhdeo Prasād. The basis of assessment was the old *batai* collections together with certain cesses, and the equitability of the rates was ensured by checking them with the grain and cash rents and with the average revenue of the preceding ten years. The cesses, representing certain percentages on the revenue, formerly numbered sixty-four and were reduced to four only, namely *kharrā*, a house or income tax; *ghasmāri* or grazing fee; *chaudharbāb*, for the remuneration of the *chaudhris* or headmen; and *malba*, for village expenses. Of the above, the first two were levied from non-agriculturists, and the last two from agriculturists.

System of account and control.

Prior to 1885 there was no general treasury in the State; the practice was to spend the revenues in advance, to assign the actual receipts to a banker of Ajmer, and to draw on him for expenses from time to time, paying him both interest and discount for these advances. A treasury was, however, established on the 1st April

1885 and a regular budget system introduced. In 1902 the services of the Auditor of the Jodhpur-Bīkaner Railway (a Government official) were utilised for auditing and checking the State accounts, and a special office was then started and placed under him. The system of account is what is known as *Mahājanī jamā kharch*; all receipts and disbursements are daily posted in the ledger, from which the entries are duly tabulated under the various heads, and cash balances are drawn up at the close of each day.

Financial position.

The liabilities of the State, including the personal debts of the Mahārājā (some 4·2 lakhs), amounted on the 30th September 1906 to 34¾ lakhs in round numbers, and of this sum, 25½ lakhs were due to the Mysore Darbār, having been borrowed in 1898 to permit of the extension of the Jodhpur-Bīkaner Railway to the Sind border. Against these debts, however, the State has a very valuable asset in its share of the railway just mentioned, the capital outlay thereon to the 31st December 1906 having been 122·7 lakhs and the actual market value thereof being estimated at the present time at about 274 lakhs; in addition, the recoverable arrears and advances amounted to 18·3 lakhs, the investments to 17·2 lakhs, and the actual cash balance in the treasury on the date last quoted to more than 12 lakhs. In this way the liabilities may be said to be between one-ninth and one-tenth of the realisable assets, and the financial outlook is far from unsatisfactory. The Mysore loan will certainly be repaid at the fixed time (October 1908) and, with normal seasons and a continuance of the present good management, the State should then be free of debt.

Coinage.

The earliest Jodhpur coins of which there is any mention are the copper pieces issued by Amar Singh, the elder brother of Mahārājā Jaswant Singh I, at Nāgaur in the seventeenth century, and called after him Amar Shāhi. They were without impress on one surface, while on the other they bore an inscription in Persian characters within a square border; the average weight was 255 grains. Next come the coins of Mahārājā Ajīt Singh, believed to have been minted at Ajmer in or about 1721; it is not known of what metal they were made, and specimens, if they exist at all, are very rare. In the time of Mahārājā Bijai Singh (1753--93) a mint was established at Pāli, and the coins struck there (and subsequently at other places) were called Bijai Shāhi; they consisted of gold, silver and copper pieces. Lastly, towards the end of the eighteenth century, silver coins, known as Iktīsanda, were minted at Kuchāwan. In addition to the Bijai Shāhi and Iktīsanda, the following issues of other States were current in Mārwār during the nineteenth century and are still to be found:—(i) the Akhai Shāhi of Jaisalmer (in the western districts); (ii) the Jhār Shāhi of Jaipur (in the north-eastern districts); (iii) the Chandori of Udaipur (used on ceremonial occasions); and (iv) the Bhīlāri of Udaipur (in the hilly tracts in the south-east and south).

Bijai Shāhi silver coins.

The Bijai Shāhi silver coins consisted of the rupee, eight-anna and four-anna pieces, and were first struck in 1761. For nearly one hundred years the name and symbol of Shāh Alam II were shown, the

inscription on the obverse running *Sikka mubārak bādshāh ghāzi Shāh Alam* and on the reverse *Sanat 22 julūs maimanat mānūs zarab-i-dār-ul-mansūr Jodhpur*—both in Persian. Coins bearing Her late Majesty's name were first issued in 1858 with the following inscriptions in Persian: on the obverse *Ba-zamān-i-mubārak Queen Victoria malikah muazzamah Inglistān wa Hindustān*, and on the reverse *Mahārājā Dhirāj Srī Takht Singh Bahādur zarab-i-Jodhpur*; but the dies were altered some ten years later, and the issues of 1869, 1870 and a few succeeding years had *Ba-ahd-i-Queen Shāh-i-Hind wa Farang zar wa sīm rā sikka zad Takht Singh* in Persian on the obverse, and on the other side *Srī Mātājī* in Hindī and *Zarab-i-Jodhpur Mārwār 1926* in Persian. From 1873 onwards the inscriptions on either surface were the same as in the 1858 issue except that the name of Jaswant Singh was substituted for that of Takht Singh, the date or *Samvat* was entered in Persian, and the words *Srī Mātājī* were added in Hindī on the reverse. The special mint marks on the Bijai Shāhi coins were a *jhār* or spray of either seven or nine branches, a sword, and sometimes a dagger.

Iktīsanda silver coins.

The following is a brief account of the currency known as Iktīsanda. On the advent of the Marāthās, the imperial mint at Ajmer was closed, and the minters were on their way to Delhi with the dies when they were intercepted at Kuchāwan and induced by the Thākur of that place to settle there. The Thākur, being in high favour with the Mahārājā, obtained permission to strike silver coins of the Ajmer type, and a mint was accordingly established. The coins turned out consisted of rupee, eight-anna and four-anna pieces, and there have been two issues. In the first, the inscription on the obverse was the same as in the early Bijai Shāhi coins with the addition of a sword over the word *Shāh*, while that on the reverse was (in Persian) *Sanat* 31 *julūs maimanat mānūs zarab-i-dār-ul-khair Ajmer*. From the opening words it derived the name Iktīsanda—the thirty-first year of Shāh Alam's reign, which began in 1759 and closed in 1806. In the second issue, which appeared in 1863, the Persian inscriptions were *Queen Victoria malikah muazzamah Inglistān wa Hindustān* with a flower over the word *Queen* on the obverse, and *Zarab-i-Kuchāwan ilāqā Jodhpur sanat Iywī* (for *Iswī*) *1863*.

The Bijai Shāhi coins have been minted at various times at Pāli, Sojat, Jodhpur, Merta and Nāgaur, and the Iktīsanda only at Kuchāwan; and the total number of rupees struck at these mints from the commencement of operations till the year 1900 is said to have exceeded 36½ millions, of which some 3½ millions were Iktīsanda. Up to 1893 the Bijai Shāhi rupee was of about the same value as the British, while the Iktīsanda exchanged for eleven or twelve Imperial annas; but the closure of the Government mints to the unrestricted coinage of silver caused the local coins to depreciate in value to such an extent that in 1899 Rs. 122-12 Bijai Shāhi or Rs. 150 Iktīsanda exchanged for Rs. 100 British. The Darbār accordingly resolved to convert its local rupees and to introduce Imperial currency as the sole legal tender in the State; and this very desirable reform was carried

out in 1900. The Government of India having fixed the rate of exchange at ten per cent. for Bijai Shāhi and fifty per cent. for Iktīsanda, a circular was issued on the 1st May 1900 (i) inviting the public to bring their local coins to certain branch treasuries and exchange them for British rupees at the above rates in the course of the succeeding six months, and (ii) warning them that, after the 1st November 1900, Imperial currency would be the sole legal tender in Mārwār and no local rupees would be accepted in payment of State dues. The balance in the treasury being quite insufficient for the carrying out of the scheme, the Government assisted with an advance of fifteen lakhs, free of interest, and agreed to recoin the local into British rupees up to a maximum amount of two crores (twenty millions). As a matter of fact, the total number of rupees tendered for conversion during the six months was 10,227,134 (namely 9,273,628 Bijai Shāhi and 953,506 Iktīsanda), and these were recoined at the Calcutta mint, the entire cost of the operations, including transit charges, establishment, escort, etc., amounting to Rs. 34,506 or less than 5½ annas for every hundred rupees dealt with. Another noteworthy feature was that, though nearly 10¼ million rupees were despatched to Calcutta, only five coins were rejected as faulty by the authorities of the mint there, and for this remarkable result great credit is due to the experts whom the Darbār employed at each collecting centre.

CHAPTER XIII.

LAND REVENUE AND TENURES.

Tenures.

Of the 4,030 villages in Mārwār, only 687 are *khālsa*, or under the direct management of the Darbār, and they occupy about one-seventh of the entire area of the State; seventy-four of the above villages are *mushtarka*, that is to say their revenues are shared by the Darbār and certain *jāgīrdārs* jointly. The rest of the territory is held on one of the following tenures, namely *jāgīr*, *jīvka*, *sāsan*, *dohlī*, *bhūm*, *inām*, *pasaita* and *nānkār*.

Jāgīr.

The *jāgīrdārs* pay a yearly military cess called *rekh*, which is supposed to be eight per cent. of the gross rental value of their estates, and have to supply one horseman for every thousand rupees of revenue, or one camel *sowār* for every Rs. 750, or one foot-soldier for every Rs. 500. In some cases this military service (*chākrī*) has been commuted for cash payments at the rate of Rs. 204 for a horseman, Rs. 144 for a camel *sowār*, and Rs. 84 for a foot-soldier. They have also to pay *hukmnāma* or fee on succession, namely seventy-five per cent. of their annual income, but when a son or a grandson succeeds, no *rekh* is levied or service (*chākrī*) is demanded for that year, while if an adopted son or a brother or cousin succeeds, the service or cash payment in lieu is alone excused. In the matter of succession the rule of primogeniture holds good, and, if there be no son, a successor is appointed by adoption, and must be a lineal male descendant of the original grantee; otherwise the estate escheats to the Darbār. Within this limited area, the adoption of the nearest male relative is more or less obligatory, and, when a choice occurs, it is between those who are equally related. The person adopted is nominated either by the *jāgīrdār* during his lifetime or by his widow within twelve days of his death or, should both have died without having made a selection, by the leading members of the family. At the same time, it should be understood that, strictly speaking, a *jāgīr* estate is granted for a single life only, and, on the death of the holder, immediately becomes *khālsa* (*i.e.* reverts to the fisc) and so remains until a successor has been recognised by the Darbār, when it is again conferred and a fresh *pattā* or lease is issued. Disobedience to a lawful summons or order, or the commission of a grave political offence involve sequestration or confiscation, but the latter course is rarely resorted to if there be any practical alternative. Lastly, a *jāgīr* estate cannot be sold, but mortgages are not uncommon, though they cannot be foreclosed.

The *jāgīrdārs* of distinction are styled *tāzīmi* Sardārs and number 144, of whom 122 are Rāthors descended from the ruling stock, and the rest belong to other Rājput clans and are known as *Ganāyats*.

The *tāzīmi* Sardārs are divided into three classes according to the degree of recognition which they are entitled to receive from the Mahārājā in *darbār*, and there are at present 86 in the first, 45 in the second, and 13 in the third class. In the first class are twelve nobles (all Rāthors) who are held superior to the rest and are called *Sarāyats*; a list of them will be found in Table No. XXVIII in Vol. III-B.

Jūna jāgīr.

A *jāgīrdār*, whose estate has been resumed by the Darbār, is usually permitted, in consideration of his previous position and in order to save him from becoming homeless and penniless, to retain a certain portion of it free of rent or tax of any kind; and this tenure is known as *jūna jāgīr*.

Jīvka.

Jīvka is a grant to the younger sons of the chief or of a Thākur for their maintenance. After three generations the holder has to pay cess (*rekh*) and succession fee (*hukmnāma*) and supply militia like the ordinary *jāgīrdār*, and, on failure of lineal descendants of the original grantee, the land reverts to the family of the donor.

Sāsan and *dohlī.*

When a village is granted in charity to Brāhmans, Chārans, Nāths, etc., it is called *sāsan* and is held rent-free; when, however, the grant is for a portion of a village or certain wells or fields, it is known as *dohlī*. Lands can be given on these tenures only by the Darbār, and, on failure of descendants of the original grantee, they revert to the State; in former days they were sometimes sold, but this practice was stopped by the late Mahārājā. Some of the *jāgīrdārs*, contrary to the wording of their leases, have made grants of this nature, but they are invalid; and, in the event of a *jāgīr* estate becoming *khālsa* they would not be respected by the Darbār.

Bhūm.

The *bhūmiās*, or those holding on the *bhūm* tenure, have to perform certain services, such as protecting their villages, following up the tracks of criminals, escorting money and guarding officials while on tour, and some of them pay a quit-rent called *bhīm-bāb*; provided these conditions are satisfied and they conduct themselves peaceably, their lands are not resumed. Grants on the *bhūm* tenure are made only by the Darbār, and can be conferred even in villages held by the *jāgīrdārs*.

Bhūmi-chāra.

Bhūmi-chāra is the tenure on which the Rājputs, whose ancestors held lands prior to the Rāthor conquest, and the Thākurs of Mallāni enjoy their estates. They pay a small sum of money yearly to the Darbār—fixed from time immemorial and called *faujbal*—and have no further obligations whatsoever. Treason against the State or the commission of a heinous crime can alone justify the resumption of an estate held on either of these tenures, and the position of the *bhūmiās* generally is more important and durable than that of the *jāgīrdārs*.

Dūmba.

A tenure known as *dūmba* is found chiefly in Bāli and Desuri, and has sometimes been confused with *bhūm*, but the two are quite distinct. The latter, as already observed, is granted only by the Darbār, but a village can be given in *dūmba* by either the Darbār or a *jāgīrdār*. Lands are made over to be peopled and brought under cultivation and, this having been done, they remain with the holders

in perpetuity so long as they conduct themselves peaceably and pay a permanently fixed rent; no service is required, nor is any other tax demanded.

Inām. *Inām* is a rent-free grant for services rendered to the State; it lapses on the failure of lineal descendants of the original grantee, and is sometimes given for a single life only. The *ināmdār* cannot sell the land so held by him, but he can mortgage it.

Pasaita. *Pasaita* is the name of the tenure on which land is given by either the Darbār or a *jāgīrdār* to certain persons in lieu of payment for services which have to be rendered. No tax of any kind is levied, but the grant can be resumed whenever the holders' services cease to be required.

Nānkār. Lastly, there are a few villages in the Nāwa district held chiefly by Rājputs on the tenure known as *nānkār*—a word meaning "working for bread." The conditions are much the same as in *jāgīr* estates except that no cess is levied, no service is required, and only succession fee has to be paid.

Cultivating tenures. The cultivators in the *khālsa* and *jāgīr* villages may be grouped into two classes, namely *bāpidārs* and *gair-bāpidārs;* the former possess occupancy rights and pay lighter rates than the others, enjoying a concession of about twenty per cent., while the *gair-bāpidārs* are merely tenants at will. The *bāpidār* has been given certain other privileges: *e. g.* (i) standing timber and grass in his field belong to him; (ii) when a new well is sunk, he pays dry rates for ten years if the well be *pakkā* and for five years if it be *kachchā*, and thereafter the usual wet rates; and (iii) if he leave his village under press of famine or for other reasons, he is not deprived of his rights provided he returns within five years. Again, though he cannot permanently alienate his land, he is at liberty to mortgage it with or without possession to tide over a period of distress, but a mortgage with possession confers no right on the mortgagee to have the land cultivated by any other person than the mortgagor. In August 1899, when apprehensions of a terrible famine were entertained, mortgages were very numerous—in accordance with the proverb *Parto kāl ne hoti rānd*, meaning "Famine and widowhood appear terrible at first."

System of collection of revenue. In former times the land revenue was paid almost entirely in kind, and there were several modes in which the Darbār's or the *jāgīrdār's* share of the produce was realised. The most prevalent system (and the one most popular with the cultivator) was that known as *lātā* or *batai*, by which the produce was collected near the village and duly measured or weighed. The share taken by the landlord varied from one-fifth to one-half in the case of dry, and from one-sixth to one-third in that of wet crops; it was greater on dry crops because they cost less to cultivate and yielded better and more valuable fodder, of which no share was ordinarily claimed. Another system was *kūnta*, similar to the one just described except that the landlord's portion was not actually weighed or measured but taken by guess or calculation. A third method was *kānkar kūnta* by which the out-turn was estimated while the crops were still standing, and the

share was taken either in kind or in cash on the strength of this calculation. Other systems were :—*mukatta*, a fixed rate per field, realised in cash; *dorī*, a fixed rate per measured *bīgha*, paid in cash or kind; and *ghūgri*, a fixed quantity of grain per well or per field, or a quantity equal in amount to the seed sown (*bīj ghūgri*). These modes of collecting the revenue (particularly *batai*) still prevail in most of the alienated villages, but in the *khālsa* area cash rents are in vogue.

Settlement of 1894—96. The first and only regular settlement was introduced between 1894 and 1896 (originally for ten years) in 566* of the *khālsa* villages (having an area of 5,775,075 *bīghas* or about 3,610 square miles), and is still in force; it is on the *ryotwāri* system, *i.e.* the Darbār deals directly with the cultivator. As a preliminary measure, a field survey was carried out, village maps and records of rights were prepared, soils were classified, and crop experiments were made; the assessment was based on the most careful calculations of available data extending over some twenty years. The area dealt with was divided into two groups, namely (*a*) secure or comparatively so, *i.e.* irrigated from wells, tanks or other sources, where the yearly out-turn varies but slightly, and remissions of revenue are necessary only in seasons of dire famine (*trikāl*); and (*b*) insecure or solely dependent on the rains, where there is no certainty as to the annual yield. In the former portion the assessment is fixed, and in the latter it fluctuates in proportion to the actual out-turn of the year. With a view to determine rates and their applicability, the districts were subdivided into groups or circles similarly circumstanced, *i.e.* possessing similar advantages in the matter of soil, climate, position as to markets, facilities for manure, means of irrigation, etc. The basis of the assessment was the old collections in kind with certain *lāgs* (cesses) or, in other words, the amount which the Darbār used to receive whether in cash or in kind; this was taken as the standard, and the gross yield was calculated from the results of crop experiments, supplemented by local enquiries. From these, having due regard to the Darbār's share of the produce and the cesses, the State demand was deduced, and the amount thus obtained was checked by (i) the average revenue of the previous ten years; (ii) the revenue obtained when payments in kind were in vogue (as shown in the old *jamābandīs* or rent-rolls); (iii) the opinions of local officers as to the revenue capacity of the holding; and (iv) the sums proposed by the *chaudhris* or headmen of the village.

The rates per acre of wet land vary from Rs. 2-5-6 to Rs. 10 (average Rs. 2-10-6), while those for dry land range from $1\frac{1}{4}$ to $12\frac{1}{2}$ annas and average $4\frac{1}{2}$ annas. Only two cesses are levied, namely *malba* (for village expenses) and *chaudharbāb* (for the remuneration of the *chaudhris*), and they nowhere exceed $4\frac{1}{2}$ per cent. of the revenue demand, while in many cases they amount to only $2\frac{1}{2}$ per cent. The average extent of a holding is reported to be four acres of wet, and twenty-four acres of dry land.

*The present number is 559 villages, occupying an area of 3,527 square miles.

In the 128 *khālsa* villages which have not yet been assessed, the land revenue is collected either according to the *batai* system described above—the Darbār taking a specified portion of the produce—or according to a system known as *ānk-bandī*, under which an estimate of the probable out-turn is made by the Rāj officials and a lump sum (in cash) is fixed for the year.

CHAPTER XIV

Miscellaneous Revenue.

Opium. Some thirty or thirty-five years ago, the poppy appears to have been cultivated on a fairly large scale in some of the submontane districts in the east, particularly in the estate of the Thākur of Raipur, and the crude opium was sent to Pāli, where it was purified and formed into cakes which were either exported to Bombay or consumed in Mārwār itself. In 1884, however, its cultivation for the manufacture of opium was forbidden, and the area sown has since been quite insignificant.

The opium consumed in the State comes chiefly from Kotah and Udaipur, and the revenue realised by the Darbār is derived from import and transit-duties and vend fees. The import duty was raised from Rs. 26 to Rs. 80 per maund in 1882, to Rs. 100 in 1885, to Rs. 150 in 1891, and to Rs. 200 (the present figure) in 1892; transit-duty is levied only on opium passing through Mārwār *en route* for Jaisalmer or Sirohi, and amounts to Rs. 5 per maund. The average annual revenue during the eighteen years ending 1900-01 exceeded Rs. 1,70,000, but the actual receipts in 1905-06 were only Rs. 67,074. Under rules issued in 1902, no opium can be exported from, imported into, or sold within the State except by a licensed dealer, and no dealer can sell to any person at one time more than ten tolas unless such person be himself a licensed dealer or has been specially authorised to possess the drug in greater quantities. In 1905-06 there were 894 shops for the sale of opium, and the license-fees brought in as many rupees.

Salt. The salt revenue is considerable, amounting to more than fifteen lakhs a year; and practically the whole of this sum is received directly or indirectly from the Government of India under the treaties of 1870 and the agreement of 1879. Directly, the Government pays about eleven lakhs, namely—(*a*) rent for the lease of certain salt-lakes, Rs. 8,01,000; (*b*) compensation for losses sustained by the suppression of manufacture and the abolition of duties, Rs. 1,60,395; and (*c*) royalty on sales exceeding a certain amount, which varies from year to year and may be said to average between Rs. 1,30,000 and Rs. 1,70,000. In addition, the Government delivers annually 24,000 maunds of salt free of all charges and 225,000 maunds at cost price for the use of the Mahārājā and the people, and the sale of this salt usually brings in nearly four lakhs a year. The rest of the revenue is derived from the sale proceeds of *khāri* or earth-salt and license-fees for the manufacture of saltpetre, and averages about Rs. 3,200 a year.

The salt consumed in Mārwār is of two kinds locally termed *khāri* and *mītha*. The former is used chiefly for industrial purposes

and by the poorer villages round Bilāra, and its manufacture which, under the agreement of 1879, is permitted only at Pichiāk and Mālkosni in the Bilāra district, is directly under the control of the Darbār. It is available in three qualities at the rate of R. 1-2, R. 1-10 and Rs. 2-2 per maund respectively; the total out-turn in any one year is restricted to 20,000 maunds, and in 1905-06 amounted to 5,497½ maunds. The *mītha* salt is manufactured by Government at the Sāmbhar lake and at Dīdwāna and Pachbhadra; that from the first of these sources, being considered the best, sells at Rs. 2-4 per maund, and the other varieties at Rs. 2-1-6 and Rs. 2-0-9 respectively. These are the rates at which the Darbār sells the salt which it receives from Government, and they represent the selling price at the place of manufacture *plus* a Rāj duty of Rs. 2 per maund; this duty was formerly Rs. 2-8 or, in some cases, Rs. 2-6-6, but, with effect from the 1st April 1903, the Darbār, following the lead of the British Government, reduced it to Rs. 2. The average consumption of *mītha* salt per head is reported to be eight or nine lbs. a year as compared with ten lbs. just twenty years ago.

Excise.

In former times liquor was either very lightly taxed or not taxed at all, and Mahārājā Bijai Singh (1753—93) forbade its manufacture altogether, but this order was not in force for very long. Excise operations were first undertaken in 1885, but were confined to the capital and conducted by the *Kotwāl*; the tax on distillation of country spirits ranged from one anna to four annas per rupee, and the total receipts amounted to Rs. 1,700. In 1887 operations were extended to the districts with the object chiefly of preventing smuggling into Ajmer-Merwāra, and a separate *ābkāri* department under a Superintendent came into existence. The State was divided into five circles, each under an Inspector with a small staff, and to a board of three directors (two for *jāgīr*, and one for *khālsa* villages) was entrusted the duty of supervising the general working of the department; further, the co-operation of the *tāzīmī jāgīrdārs* was secured by granting them (*a*) half of the license-fees; (*b*) the *ābkāri* income formerly realised by them; and (*c*) the right of setting up a still for the manufacture of liquor intended for their personal consumption. A notification published in May 1887 announced that no still or shop would be considered legal without a license, and that the officials of the department would supervise and inspect the manufacture, test the quality and wholesomeness of the liquor, and regulate and fix the minimum price; lastly, to facilitate the detection of cases of illicit manufacture, a system of rewards to informers was introduced. In 1889 the staff was strengthened by the appointment of two Assistant Superintendents, and the five circles were broken up into thirteen distinct charges, each under an *ahlmad*; in 1893 the posts of directors were abolished, in the following year the operations were extended to hemp drugs, and in 1898 licenses for the sale of European liquor were first granted.

The excise revenue is derived from country spirits, intoxicating drugs and foreign liquor, and amounts to about Rs. 1,03,600 a year or,

if the cost of establishment and compensation to *jāgīrdārs* be deducted, Rs. 85,160.

Country liquor.

Country liquor is prepared by distillation from the *mahuā* flower, molasses and the bark of the *babūl* tree, and the right of manufacture is sold yearly by auction to the highest bidder, who keeps his still subject to departmental inspection. Fees are also levied for the privilege of sale, and in 1906 there were 124 stills (including those maintained by *jāgīrdārs*) and 160 shops. Three kinds of liquor—*āsa*, *dubāra* and *chhāta*—are manufactured and issued for sale after being tested; the *āsa* was formerly of three qualities, but two more were subsequently introduced, and the strengths of the five varieties now offered for sale are 14°, 22°, 30°, 35° and 40° under proof, the prices per bottle of twenty-four ounces being respectively Rs. 8, Rs. 6, Rs. 5, Rs. 3 and R. 1-4. The other kinds of liquor mentioned above sell for from twelve to nine annas per bottle. The average annual income for the ten years ending 1900-01 was approximately Rs. 65,000, while the actual receipts in 1905-06 were Rs. 90,490. There is still room for a further increase in the revenue by the introduction of foreign competition in the excise contract which has for several years been the sole monopoly of local *kalāls*.

Drugs.

The drugs in use are derived from the hemp plant and are known as *bhang* and *gānja*; the right to sell them is also put up to auction and brings in about Rs. 4,000 or Rs. 5,000 a year. In 1906 there were seventy shops for the sale of these drugs, and the retail prices were: *bhang* eight annas, and *gānja* Rs. 4 per seer.

Foreign liquor.

The foreign liquor is entirely of European manufacture, but nothing is known as to the amount imported or sold. The two licensed shops at the capital pay a yearly fee of Rs. 500 each, and are patronised almost exclusively by the local Rājput nobility and a few of the wealthier Mahājans; a third shop was opened at Merta Road in 1903-04, but no license-fee is charged.

Stamps.

The stamp revenue is derived from judicial or court-fee, and non-judicial or revenue stamps; the former are the more important source of income, generally yielding about three-fourths of the receipts. During the decade ending 1900-01, the average annual income was nearly a lakh and the expenditure rather less than Rs. 4,000, while in 1905-06 the receipts amounted to Rs. 90,589 and the expenditure to Rs. 10,580; the last figure, however, represents the cost of the Registration as well as the Stamp department, the two having been amalgamated in 1903. The number of licensed stamp vendors is at present 29, namely two at the capital and twenty-seven in the districts.

Stamp papers were first introduced in 1873 for petitions, bonds and *pattās* (deeds or leases), but, save in the case of the last, their value was not indicated, and the *Hākims* were authorised to note the same on them at the time of sale. Suits of a value not exceeding Rs. 100 were entertainable on four-anna stamp papers, but about a year later, this rule was modified to the extent that suits up to Rs. 50 could be filed on two-anna papers. Court-fees were, as stated at page 134

supra, levied in cash at the time of execution of a money decree from 1874 to 1883, when stamp papers, varying in value from R. 1 to Rs. 1,250, were introduced, as well as an eight-anna paper for petitions and a set of stamps (ranging between one anna and Rs. 50) for bonds and miscellaneous deeds. Stamp regulations were issued in 1886 and amended in 1889, when printed stamp papers took the place of the older lithographed variety. These papers are of seventeen different values (from one anna to Rs. 1,000) and, till May 1903, were printed in four colours, namely red for *rasūm* or court-fees, green for bonds, blue for miscellaneous purposes including petitions, and yellow for the *ābkāri* and Registration departments, but they have since been issued in two colours only—red for court-fees as before and blue for all other purposes—and, with effect from April 1905, the one-anna blue stamp paper has been superseded by an adhesive stamp of the same value.

CHAPTER XV.

LOCAL AND MUNICIPAL.

The Jodhpur Municipality.

No municipalities in the true sense of the term, *i. e.* towns possessed of corporate privileges of local self-government, are to be found in the State, but a municipal committee was established at the capital in July 1884. The members are all nominated* by the Darbār from among the leading castes and communities and now number eleven, though formerly there were as many as twenty-eight. The Residency Surgeon was President until 1901, when he was succeeded by the *Kotwāl* (who was formerly Vice-President), and a paid Secretary has always been employed. The committee is entrusted with the sanitary regulation of the city, the settlement of disputes relating to easements such as the construction of private latrines, platforms (*chabūtrās*), doors and windows, and the prevention of encroachments on public thoroughfares; and appeals from its decisions lie to the *Mahakma khās*. The municipal expenditure, about Rs. 20,000 a year, is now borne entirely by the Darbār, but until June 1900 a conservancy cess was levied from all officials residing in the city at the rate of one pie (in the local currency) on every five rupees of their salary.

At the hands of the Darbār and the committee, the sanitary condition of Jodhpur has steadily improved during the last twenty years; several double sets of public latrines and urinals for males and females have been erected at convenient places, and for the Srīmāli Brāhmans, who object to the use of latrines, a special plot of ground has been allotted. The elevated site of the city lends itself admirably to natural flushing, and such artificial drainage as exists has been improved by the recent paving of the main streets. For conservancy purposes, Jodhpur and its suburbs are divided into four circles, each served by a corps of sweepers, and a staff of municipal police, thirty-one strong, is employed to prevent the commission of public nuisances.

The conservancy tramway.

A tramway line, about $4\frac{1}{2}$ miles in length and constructed in 1897-98, runs round the city, passing all but one of the public latrines; buffalo traction is employed on this section. Twice a day (in the early morning and late at night, so as not to disturb the public), the wagons are loaded with filth and refuse, and collected and formed into trains outside the Sojatia gate, whence they are hauled by steam-power a distance of nearly five miles into the open country where the night-soil is trenched and the rubbish, etc. burnt. In 1898-99 the line was extended up to and round the Mahārājā's stables and to the electric power house near the palace (to carry coal), and the total

*It is proposed to introduce the elective system to some extent.

length is now more than thirteen miles, the gauge throughout being 2 feet. The rolling-stock comprises forty wagons of 20 cubic feet, and forty of 25 cubic feet capacity, driven by two 5-inch cylinder locomotive engines. The working of the section round the city and the trenching operations at the terminus are in the hands of the municipal committee, while the portion of the line on which steam-power is used is managed by the Public Works department. The capital cost up to date has been Rs. 25,915, and the working expenses average about Rs. 7,000 a year.

Sanitary arrangements at Pāli and Bilāra.

At Pāli a small conservancy establishment has been maintained since 1886-87, the expenditure being met partly from a monthly grant made by the Darbār (Rs. 100 until 1901 and Rs. 50 since) and partly from subscriptions from the leading merchants (about Rs. 25 per month); and a similar establishment is kept up at Bilāra.

CHAPTER XVI.

PUBLIC WORKS.

History of the department.

A regular Public Works department was first organised in 1883 and consisted of two sections., *viz.*--(*a*) railway and (*b*) general; its head, who has been a European officer from the very beginning, held for twenty-one years the dual office of Manager of the Railway and State Engineer, one-half of his pay and travelling allowances being debited to each section. The subordinate staff of the general branch comprised two overseers, two sub-overseers, two *mistrīs* and one draughtsman until 1894, when it was strengthened by the addition of an Assistant Engineer, an overseer and a sub-overseer. In August 1904 the two sections were separated; the railway remained under the Manager who, for a time,* looked after the conservancy tramway, the electric light works, the ice and aërated water factories and the water lift (all at the capital), while the general section, *i.e.* roads, buildings and irrigation works, was placed under a full-time Engineer.

The railway has already been noticed in Chapter VIII *supra*, and it will suffice here to say that the superior staff consists of the Manager, two District Managers, four Assistants, a Loco-Superintendent and an Auditor, and costs the Jodhpur State about Rs. 86,000 a year.

In the general branch the establishment consists of the Engineer, an Assistant Engineer, three supervisors, an overseer, six sub-overseers, and a staff of clerks, and the annual cost is Rs. 29,000.

Expenditure.

Excluding the railway and famine relief works carried out under departmental agency, the expenditure on the construction and maintenance of works of public utility during the eighteen years ending 31st March 1905 amounted to more than sixty-eight lakhs of rupees, or an annual average of about 3·8 lakhs, and the establishment charges during the same period exceeded three lakhs, and averaged Rs. 18,000 a year or about 4½ per cent. of the total expenditure. In 1905-06 the actual outlay (railway excluded) was Rs. 3,30,000, namely original works Rs. 2,00,000, repairs Rs. 80,000, miscellaneous Rs. 21,000 and establishment Rs. 29,000; the percentage of establishment on total expenditure was thus nearly nine.

Principal works.

The chief original works carried out during the last twenty-four years have been numerous irrigation and water-supply projects, such as the Bālsamand tank and canals; the Chopāsni tank; the Kailāna reservoir; the Jaswant Sāgar (which, with its distributaries, has cost

* The ice and aërated water factories are now under the Loco-Superintendent of the Jodhpur-Bīkaner Railway, and the conservancy tramway, the electric light works, and the water lift under the State Engineer.

up to date more than nine lakhs); the Sardār Samand (cost nearly eight lakhs); the Edward Samand (3·75 lakhs); and tanks at Pāli, Sādri, Chopra, Khārda and Jograwās. Among buildings may be mentioned the public or Jubilee offices, designed by Colonel (now Sir Swinton) Jacob and constructed at a cost of about 4·5 lakhs; the Rātanāda palace with its stables, swimming-bath, electric installation, etc. (approximate cost 3·8 lakhs); the Central jail; the new Residency and several other houses for officials; the palace at Bālsamand; and the Imperial Service cavalry lines.

Practically all the works above enumerated were carried out under the supervision of Mr. Home, whose connection with Jodhpur began in April 1882 and who was for more than twenty-four years the very successful and popular head of the department; his recent retirement from the service is a real loss to the State.

CHAPTER XVII.

ARMY.

Present strength and cost.

The State maintains two regiments of Imperial Service lancers (normal strength 1,210) and a local force consisting of about 250 gunners and 1,240 infantry, or a total of 2,700 men. In 1905-06 the troops numbered 2,243 of all ranks—both Imperial Service regiments having been below strength—and cost the Darbār about 6·6 lakhs. There are 121 guns of various kinds, of which sixty (namely forty-three field-pieces and seventeen mounted in forts) are reported to be serviceable. In addition, the irregular militia supplied by the *jāgīrdārs* mustered 1,851 in 1905-06, namely 1,646 mounted men and 205 foot-soldiers.

Imperial Service troops.

The Imperial Service troops represent the contribution of the State towards the defence of the Empire; they were raised between 1889 and 1893, and are called the *Sardār Risāla* after the present chief. The total cost of maintaining these regiments during the sixteen years ending March 1905 was about 75 lakhs, or an average of nearly 4¾ lakhs per annum, but they have been considerably below strength for some time, and the yearly expenditure is now ordinarily less than four lakhs. In 1905-06, when the corps numbered 750 of all ranks (33 officers, 115 non-commissioned officers and 602 men), the actual cost was Rs. 4,82,996, but this sum included compensation for dearness of fodder and grain, as well as certain arrears of pay. In the previous year, when the total strength was 742, the cost was Rs. 3,20,489. The officers, *kot-daffadārs*, farrier major and trumpeters are armed with revolvers and swords, and the *daffadārs*, farriers and *sowārs* with carbines, lances and swords; the revolvers and carbines are supplied by Government. The men are for the most part Rājpūts of the ruling clan or Kaimkhānis, and are well mounted, chiefly on Arabs; transport is complete for one regiment.

In 1895-96 two squadrons were deputed to the Sind border to prevent certain Muhammadan outlaws known as Hūrs from entering Mārwār, while in 1897-98 the first regiment formed part of the reserve brigade of the Tīrāh Field Force, two detachments employed on convoy duty doing well and gaining eighty-nine silver and sixty-seven bronze medals. In 1899-1900, in addition to the sixteen picked horses presented by the Mahārājā, 194 horses were despatched to the Transvaal under the care of eight non-commissioned officers, eleven men and fifty-five syces who returned in June 1902, the services of one *daffadār* having attracted special notice. In 1899 the first regiment was moved to Muttra and proceeded thence in August 1900 to China, where it was well reported on and was largely represented in the expedition to the Laushān hill and Chinausai; it returned a year later, having earned 576 silver and 333 bronze medals, and was

subsequently permitted to bear on its colours and appointments the honorary distinction "China 1900." In 1902 the Government of India showed its further appreciation of the services rendered by presenting four Chinese guns to the Mahārājā, who had become Colonel-in-chief of the two regiments at the beginning of that year. As a reserve police, the corps has been thrice called on to assist the local civil authorities in the suppression of crime, namely in 1899-1900, 1902 and 1903, and on the last of these occasions a party of fifteen men had an encounter with dacoits in the Sānkra district, killing six and wounding and capturing four of them.

Local force.

The local force needs no lengthy notice; it formerly consisted of irregulars (all foot-soldiers) and regulars (artillery, cavalry and infantry), but the former were of no military value whatever and were disbanded in 1893. The strength of the regular troops varied considerably from year to year, but the average annual expenditure was about three lakhs; the men (with the exception of the gunners) were employed on military or police duties as occasion demanded, and were located partly at the capital and partly in the districts. In 1905 the cavalry and some of the infantry were transferred to the police force, which was then constituted, and the regular army has since been made up of artillery and infantry, costing about 1·8 lakhs a year. In September 1906 the artillery numbered 248 of all ranks (two officers, thirty-two non-commissioned officers and 214 men), but its reorganisation is under consideration. The strength of the infantry in the above month was 1,239, namely thirty-one officers, 134 non-commissioned officers and 1,074 men; the latter are armed with muzzle-loading muskets or carbines and bayonets, and sometimes with swords.

Jāgīr militia.

The *jāgīr* militia is a mixed contingent of horsemen, camel *sowārs* and footmen supplied by the *jāgīrdārs* under the old feudal system, and is of a very low standard; the mounted men are armed with matchlocks and the foot-soldiers with swords, and both branches are used as part of the police or as official messengers and postal escorts. The nominal strength of the force is 3,680 mounted, and 452 unmounted men, but the services of 1,365 of the former and 148 of the latter have been excused on payment by the *jāgīrdārs* of a fixed sum of money annually—see page 145 *supra*—and the number to which the Darbār is entitled is consequently 2,619, namely 2,315 *sowārs* and 304 footmen. The actual number supplied during recent years has ranged between 1,100 in *1899-1900* and 2,478 in *1894-95*, and the annual average may be put at about 1,800.

Troops of the Indian Army.

There are no cantonments in the State, and the only regiment of the Indian Army that has * a detachment in this territory is the 44th Merwāra Infantry, which sends a small guard to the Salt department treasury at the town of Sāmbhar. The Darbār, however, contributes a sum of Rs. 1,15,000 yearly towards the cost of the 43rd (Erinpura) Regiment as explained at page 72 *supra*.

* It has been withdrawn since November 1906.

CHAPTER XVIII.

POLICE AND JAILS.

Former police arrangements.

Police duties were till quite recently performed solely by the local troops (excluding the artillery) and the *jāgīr* militia described in the last chapter, and the work generally was far from satisfactory. In 1885, with a view to secure the efficient detection and regular registration of crime, a special department, known as the *Mahakma girai* was established and placed under an Inspector from Ajmer, and matters improved for a time; but the organisation of a military *corps d'élite* (the Imperial Service regiments) rather distracted attention from the police, the strength of which was in some districts allowed to fall lower than was compatible with the proper discharge of its duties. The local infantry was strengthened between 1893 and 1896, but the force as a whole failed to show to any great advantage, continuing to work almost entirely through informers, and from 1897 onwards was usually described as inefficient and to some extent insufficient. To remedy this state of affairs, the Darbār decided to have a complete reorganisation and, with this end in view, secured (in 1904) the services of an Inspector from the Punjab.

Present arrangements.

The working out of the scheme naturally took some time, but a regular police force was constituted in August 1905; it consists at present of an Inspector-General, five District Superintendents, two Assistant Superintendents, nineteen Inspectors, seventy-nine sub-inspectors, forty-one *havildārs*, 111 *naiks*, 415 mounted constables (including 200 furnished by the *jāgīrdārs*), and 1,144 unmounted constables, besides seventy-one *pagīs* (trackers), clerks, and menial establishment. The existing strength is 1,990 of all ranks, or one man for about every eighteen square miles of territory and every 972 inhabitants, and the annual cost is nearly 2·2 lakhs. Uniforms are provided free of cost (as a first issue) to all members of the force up to and including sub-inspectors, and the arms carried are old muzzle-loading muskets. For police purposes the country is divided into four districts (each under a Superintendent) and fifteen circles (each under an Inspector), and there are altogether seventy *thānas* (police stations) and 123 outposts (*chaukīs*). A reserve of one hundred men, including recruits under instruction, is maintained at the capital ready to be sent on duty as occasion may require. Enlistment is confined as far as possible to subjects of the State, irrespective of caste and creed, and all recruits, except such as may already be in the service of the Darbār, have to be between the ages of eighteen and twenty-five and at least 5 feet 3 inches in height.

Jāgīr police.

The force above described has jurisdiction throughout Mārwār except in the estates of certain Thākurs, who have been allowed for the present to retain some of their police powers.. For example, they

are held responsible for the detection and investigation of all offences other than heinous crimes, such as murder, dacoity, highway robbery, etc., committed within their respective estates, and they have to keep registers and records which are open to the periodical inspection of the District Superintendent. Cases of heinous crime occurring in their villages are dealt with by the State police.

Village police.

The Darbār maintains no village police, but in some places *chaukīdārs*—usually members of the criminal tribes—are employed and paid by the inhabitants. The remuneration they receive is termed *lāg-bāg*, and the scale varies considerably in different localities; the agriculturists pay it in kind, while others contribute small sums in cash on ceremonial occasions. In return, the *chaukīdārs* have to work as trackers and report crime and make good the value of all stolen property proved to have been lost owing to their negligence. In 1905-06 the *lāg-bāg*, or watch and ward cess, was levied in 1,602 villages in fifteen districts, and the collections amounted to Rs. 70,519 (as compared with Rs. 79,567 in the previous year); compensation to the extent of Rs. 1,286 was awarded in sixty-nine cases of theft in 1905-06 against Rs. 2,128 in 103 cases in 1904-05.

Railway police.

As observed in Chapter VIII, the State is traversed by two railways, the Rājputāna-Mālwā and the Jodhpur-Bīkaner systems. The former has its own police force, belonging to the Bombay* establishment and under the orders of the Inspector-General of Police of that Presidency, and attached to it—in order to facilitate the elucidation of crime and bring about the speedy arrest of offenders taking refuge within the limits of Mārwār—is a Darbār Vakīl who, when cases occur, communicates direct with the Superintendent of the Railway Police and the State officials concerned. On the Jodhpur-Bīkaner line, police duties are performed by a small force maintained by the Darbār at an annual cost of about Rs. 6,700, and consisting of an Inspector, six head-constables, thirty-four constables and a couple of clerks; but the Mahārājā agreed in 1900 to cede full jurisdiction to the British Government, and arrangements for taking it over are now in progress.

Working of State police.

Statistics relating to the working of the State police are only available for the last three years. In 1903-04 cognisable cases numbered 8,096, and of 2,847 persons who were arrested, 2,137 were sent up for trial and 1,403 were convicted; the percentage of those convicted to those arrested was thus 49·3, and to those sent for trial 65·6. In the following year, the number of cognisable cases fell to 7,206, of arrests to 2,826, of persons sent for trial to 2,125, and of convictions to 1,337; similarly, the percentages of convictions fell to 47·3 and 62·9 respectively. The figures for 1905-06 were:—cognisable cases 4,056; accused arrested 3,692; sent up for trial 2,892; convicted 1,675; percentage of convictions to (*a*) arrests 45·4; and to (*b*) number sent for trial 57·9. In the matter of recovering stolen property the police appears to have been fairly success-

* A change is imminent; the control of the force is about to be transferred to the Governor General's Agent in Rājputāna.

ful, having, it is said, recovered eighteen per cent. in 1903-04, nearly twenty-one in 1904-05, and more than twenty-two in 1905-06.

Dacoities, etc.

As regards the more heinous crimes coming within the scope of the old Thagī and Dacoity department, it may be noted that, during the twenty years ending 1903-04, 777 dacoities and 1,664 highway robberies were reported, or an annual average for each class of crime of about thirty-nine and eighty-three respectively. The former average was exceeded only in the four years ending 1902-03 when dacoities were very numerous—in fact, nearly half as many again as occurred in all the other years put together; similarly, the latter average was exceeded in 1891-92 and in the four years ending 1903-04, the number reported during these five years forming two-fifths of the total for the whole period. In 1905-06 (a year of scarcity) 35 dacoities and 126 highway robberies are said to have occurred, and of ninety-eight persons apprehended, forty-seven were convicted, fifty acquitted or discharged, and one was declared to be insane.

Criminal tribes.

For the reclamation of the criminal tribes, a special department, called *Mahakma Baoriān* or *jarāyam-pesha*, was established in 1882 and started work on a population which had just been deprived of its arms and conveyances by the late Mahārājā. The object in view was to make honest livelihood a possibility to these people (i) by giving them land at very low rates and settling them down to agricultural pursuits; (ii) by drafting the children of the settled population, when of a suitable age, to the capital and other large centres to be trained in handicrafts and the acquisition of peaceable habits; and (iii) by keeping under surveillance in defined areas those who declined to accept these easy conditions of life, and by punishing those who absented themselves without leave. The department, which consisted of a number of *girdāwars*, *jemadārs* and *lambardārs*, was at one time under the Revenue Superintendent and at another under the Secretary to the *Musāhib Ala* (or chief minister), but in 1894-95 the charge of the operations was made over to a separate and full-time Superintendent who was given two Assistants, one to look after discipline and conduct and the other to arrange for the provision of land. About the same time an improvement was effected by dividing the settled population into two classes—A and B, the former comprising the wilder, and the latter the better behaved—and by providing for the transfer of individuals from one class to the other according to their behaviour and progress. The system then introduced has since undergone little modification except that the strength of the executive and clerical establishments has varied from time to time, and the operations have been supervised by the Inspector-General since August 1905.

Rules regulating the work of the department were first drawn up in 1885 and finally issued in 1890; annual reports have been published since 1889-90. The number of settlements or colonies has ranged between three and six, but since 1899 there have been four, namely at Dūdor, Jaswantābād, Sādri and Sojat *Takāvi*

advances, amounting ordinarily to Rs. 4,000 or Rs. 5,000 a year, are regularly made and, owing to recent unfavourable seasons, the amount outstanding against the criminal tribes is at present rather more than a lakh and a half, besides some 5,500 maunds of grain.

For the purpose of showing what population has been under the management of the department, the year 1896-97, in which the revised system of registration was completed, is a convenient line of demarcation. During the twelve years ending March 1896 the average number of persons under control was 76,765, and of these, thirty-one per cent. represented the male adult population, while the rest were dependents; during the succeeding nine years the number under control, *i.e.* in class A, has averaged about 20,000, thirty per cent. being adult males. The result of the classification was that from 1896-97 the A group was made up almost entirely of Baoris and Sānsias, the only other tribes found in it being a few Bhīls and Mīnās (who together formed but 2·4 per cent. of the total) and a single Kolī. In the first of the periods above mentioned the number under management increased steadily from 36,382 in *1884-85* to 102,095 in *1895-96*, while during the succeeding nine years it ranged between 21,801 in *1898-99* and 18,537 in *1902-03*. In the first period, again, an average of 17,953 persons (or seventy-five per cent. of the adult male population) held between them more than 384,000 *bīghas* of land or about 8½ acres per head; whereas in the second period an average of 5,900 persons (or ninety-eight per cent. of the adult males) held between them about 171,500 *bīghas* or more than 11½ acres per head.

The tribes classed as criminal in Mārwār numbered 96,211 at the last census, namely the Bhīls 37,697 (most numerous in Mallāni, Jaswantpura, Sānchor and Jālor); the Mīnās 24,610 (found chiefly in Jālor, Bāli, Jodhpur and Desuri); the Baoris 24,306 (principally in Merta, Nāgaur, Jaitāran and Bilāra); the Bāgris 5,701 (in Jālor and Jaswantpura); the Sānsias 3,091 (in Nāgaur, Mallāni and Merta); the Kanjars 490; and the Kolīs (in Sānchor only) 316. There are said to be a few Thorīs in Jaitāran and Sojat, but none were enumerated as such in 1901. The number of men, women and children borne on the register in class A in 1906 was 19,395, namely 18,804 Baoris, 485 Sānsias, 57 Bhīls, 48 Mīnās and one Kolī, and of the above, 6,028 were adult males, of whom 5,005 were actually present on the 30th September 1906; the latter are said to possess between them about 71,519 acres of land and 14,452 cattle, or about fourteen acres and nearly three head of cattle each. Bad characters, *i.e.* those who have been punished more than once, numbered 896 (873 Baoris, 12 Bhīls, 10 Sānsias and one Kolī) and of the registered population, ninety-eight were convicted of theft, but none of highway robbery and dacoity in 1905-06. It would seem that the people are not badly off as regards lands and plough-cattle, and are on the whole fairly well-behaved.

Jails.

The conditions under which prisoners live have been greatly meliorated during the last thirty years. In 1873 the Jodhpur

jail was a part of the *kotwāli*, situated in the heart of the city, and was described as small, badly ventilated and totally unfit for a large number of convicts, and as containing "a crowded, if not happy, family of human beings, dogs, cats, pigeons and rats, wallowing in the dirt." This reproach was removed in the following year, when a large octagonal building, situated about a thousand yards outside the Sojatia gate of the city and originally intended for stables, was converted into a prison at a cost of some Rs. 20,000 ; a Superintendent was appointed, certain industries were started, cook-houses and latrines were provided, and water for drinking and washing purposes was obtained from a well sunk close by. In 1884 a small vegetable garden was added, and the system of recovering the cost of their food from the prisoners was abolished at a sacrifice to the Darbār of about Rs. 10,000 annually, while four years later, the use of the iron *bel* chain, which passed through the top ring of the fetters of all the inmates of each dormitory, was discontinued. This was followed by the prohibition of smoking, the establishment of a factory (thus releasing two wards) and the opening of a subsidiary prison in the city, but the need of a larger building soon began to be felt, and the present Central jail was accordingly erected between 1890 and 1894 at a cost of more than a lakh of rupees, the prisoners being transferred thereto on the 25th March 1894.

The present Central jail.

This jail has accommodation for 862 persons (788 males and 74 females) and, as a building, is one of the finest in Rājputāna, being well situated, constructed and ventilated : it possesses separate wards for under-trial and female prisoners, cook-houses, store-rooms, a hospital, and the other necessary adjuncts of the modern prison, and is connected with the Bālsamand reservoir by pipes which supply it with excellent drinking water. The accommodation provided was ample for the first two years but has since proved inadequate, the average daily population having exceeded 862 in ten of the last eleven years and having been as high as 1,163 in 1902 ; overcrowding is, however, avoided as far as possible by utilising the old jail which is in the vicinity. The general health of the prisoners has been very good except in 1899 and 1900, when many suffered from debility caused by the famine and deaths numbered 48 and 126 respectively (thirty-eight of the latter being due to an outbreak of cholera) ; the death-rate per mille of average strength was 53 in 1899 and nearly 118 in 1900, but in the following years has only once exceeded twenty and in 1904 was as low as 8·5, namely nine deaths among a daily average population of 1,052. The institution is under the direct control of the *Mahakmā khās*, which is advised in medical and sanitary matters by the Residency Surgeon ; the average annual expenditure during the last ten years has been about Rs. 46,000, and has ranged between Rs. 34,100 in 1895-96 and Rs. 67,500 in 1899-1900. Similarly, the cost of maintaining each prisoner was nearly Rs. 66 in the year last mentioned and Rs. 35 in 1904-05. The convicts are employed chiefly in mending roads, repairing the polo-grounds and working in gardens, though a few weave coarse rugs,

blankets, dusters, etc. ; much more might be done in teaching them an employment which would be useful to them on their release, and the subject is receiving attention. As matters stand, the profits from manufactures are quite insignificant, averaging Rs. 1,300 a year. Some further particulars regarding the Central jail will be found in Table No. XXIX in Vol. III-B.

Other prisons.

Besides the jails at the capital, small prisons are maintained at the headquarters of each district, in which persons sentenced to three months or less are confined ; and each *thāna* or police station has its lockup for under-trial prisoners.

CHAPTER XIX.

EDUCATION.

Literacy of population.

At the last census 104,841 persons, or 5·4 per cent. of the people —namely 10 per cent. of the males and 0·3 of the females—were returned as able to read and write; thus, in regard to the literacy of its population, Jodhpur stood second among the twenty States and chiefships of Rājputāna. Of the three main religions, the Jains were easily first with 235 persons in every thousand of their community literate, and were followed by the Hindus with 41 and the Musalmāns with nearly 40; but while the proportion of literacy, as between the sexes, was two females to fifty-nine males for all religions and as high as one female to sixteen males among the Muhammadans, it was only one to forty-six among the Jains and one to twenty-nine among the Hindus. Again, of the total number of persons able to read and write, 3,909 or about thirty-seven per mille were literate in English; the similar proportions for the three religions were:—Musalmāns fifty-six, Hindus forty-one and Jains nearly twenty-one, the highest figures for the Musalmāns and the lowest for the Jains being specially noticeable. Lastly, if we exclude Christians and Pārsīs, only four females were literate in English, and all were Hindus.

Early history.

In former days, the Darbār took no interest in education, and the chiefs and nobles, as a rule, considered reading and writing as beneath their dignity and as arts which they paid their servants to perform for them; schools were, of course, to be found but were private institutions of the indigenous type, such as Hindu *posāls* or *pāthshālas* and Musalmān *maktabs*, in which reading, writing and a little simple arithmetic were taught. The earliest public institutions were apparently a couple of vernacular schools (at Jasol and Bārmer) in the Mallāni district; it is not known when they were first opened, but they were attended by about one hundred boys in 1868 and were maintained from a special fund under the control of the Political Agent. In the following year, the Darbār established an anglo-vernacular school (which soon developed into a high school) and a Hindī *pāthshāla*—both at the capital—while in 1870 vernacular schools were opened at the headquarters of nine districts. An anglo-vernacular school was started at Pāli in 1873; a branch of the high school at the capital in 1875—when also two schools for the sons of Thākurs (the first of their kind in Rājputāna) came into existence—and Sānchor got a vernacular school in 1880. In this way, the State institutions (including two in Mallāni) numbered eighteen in 1881-82, namely one high school, two anglo-vernacular (primary), thirteen vernacular, and two special schools, and the cost of maintenance was about Rs. 10,000.

So matters remained until 1886-87, when the important towns of Jālor, Merta, Nāgaur, Phalodi and Sojat were provided with anglo-vernacular schools, and vernacular institutions were established at eight other places, including three in Mallāni (namely at Chhotan, Gūrha and Sindari). The same year witnessed the opening at the capital of a girls' school (called after Mr. Hewson, who was guardian to the present Mahārājā and had died in August 1886) and a Sanskrit school, as well as the amalgamation of the two special schools (above mentioned) into one institution styled the Powlett Nobles' school after the officer who was then Resident. The only other addition made during this decade was the starting in 1891 of a class at the high school for teaching the boys telegraphy and qualifying them for employment on the Jodhpur-Bīkaner Railway. Thus the number of State institutions (including five in Mallāni) had increased to thirty-two in 1891-92, namely one high school (with a special class for telegraphy), seven anglo-vernacular primary schools, twenty-one vernacular, one girls' school, and two special institutions (one for Sanskrit and the other the Nobles' school). Omitting the Mallāni schools—for which figures are not available—the number of pupils on the rolls at the end of the above year was 1,665, and the daily average attendance was 1,057 including forty-four girls, while the expenditure amounted to about Rs. 21,000. Progress during 1882—92.

In 1893 a college, named after the late Mahārājā "the Jaswant College," was established and, having been affiliated to the Allahābād University up to the Intermediate standard in the same year and up to the B.A. standard in 1898, it sent its first batch of candidates for the Intermediate examination in 1895 and for graduation in 1899. A surveying class, similar to the overseer class at the Roorkee College, was started in 1896 for the purpose of training youths for service in the Public Works department, but it was never very popular and was abolished in 1904. The vernacular school at Sindari in Mallāni was closed about this time as the *jāgīrdārs* withdrew their subscriptions, but, on the other hand, an institution, founded in the interests of the poorer Rājputs and called after the Earl of Elgin, then Viceroy of India, was established at Mandor (near the capital) in 1896 and amalgamated with the Powlett Nobles' school three years later. Lastly, anglo-vernacular schools were opened at Khārchi (Mārwār Junction) and Bālotra in 1896 and 1898 respectively, and the teaching of English was started at the Nāwa school in 1897. Consequently the State institutions (including four in Mallāni) numbered thirty-four in 1901-02, namely the college (with a surveying class), the high school (with a class for instruction in telegraphy), ten anglo-vernacular primary and nineteen vernacular schools, one girls' school, and two special schools. Omitting, as before, the Mallāni schools, from which no returns were received, the number of boys and girls on the rolls at the end of the above year was 1,718, and the daily average attendance was 1,321, of whom fifty were girls; the total expenditure was Rs. 37,000. Progress during 1892—1902.

The changes since effected may be briefly noticed. In 1902-03 the Elgin Rājput school (formerly under an official who was indepen- Progress since 1902.

dent of the Educational department) and the four Mallāni schools were transferred to the charge of the Superintendent of Public Instruction, and in the following year the Elgin school was converted into a boarding-house with accommodation for a maximum of fifty boys and amalgamated with the high school. An anglo-vernacular school was established at Merta Road in 1903 for the benefit of the children of the railway *employés*, but in 1904 the similar institution at Mārwār Junction was closed as it was no longer required and, as already observed, the surveying class at the college was abolished about the same time. The year 1905-06 witnessed the re-establishment at the capital of the Nobles' school (for the sons of Rājput *jāgīrdārs*) as a feeder to the Mayo College at Ajmer, and the opening of three anglo-vernacular schools in the districts, thus raising the number of State institutions to forty-nine by the end of March 1906. Table No. XXX in Vol. III-B. shows the progress made since 1891-92, and to this it may be added that the Darbār spent more than Rs. 41,000 on education in 1904-05 and nearly Rs. 48,000 in 1905-06. The annual average number of students under different grades of instruction during this period of fourteen years was 1,870, made up thus:—collegiate (since 1893) 15; upper secondary 14; lower secondary 44; anglo-vernacular primary 825; and vernacular primary 972. English education being an exotic, the Darbār has had to not only found an institution but fill it with scholars by holding out, for a time at any rate, special inducements; or, in other words, it has had to take the horse to the bucket and persuade him to drink. The huge disproportion between those under primary and those under the higher grades of instruction, as revealed by the above figures, is largely ascribable to the fact that the schools in the districts are not strictly affiliated to the central institution at the capital, and there is practically nothing to encourage the movement of scholars from vernacular to anglo-vernacular, or from primary to secondary schools.

Schools and scholars in September 1906.

In Table No. XXXI an attempt has been made to give a list of all the educational institutions—whether public or private, and aided or unaided—in the State in September 1906, but it cannot be considered a complete one. So far as it goes, it shows a total of 262 schools, namely fifty maintained by the Darbār (one having been opened since March 1906) and the rest by private individuals or castes or communities, with 11,997 pupils (including 229 girls) on the rolls. According to the census of 1901, children of school-going age (calculated at fifteen per cent. of the total population) numbered 290,325, namely 152,325 boys and 138,000 girls, and it may consequently be said that 7·66 per cent. of the boys and 0·16 per cent. of the girls of school-going age were under instruction in September 1906.

State schools.

The institutions kept up by the Darbār comprised a first-grade college, a high school with boarding-house for Rājputs, fourteen anglo-vernacular and thirty-one vernacular schools, a girls' school, and two special schools (one for instruction in Sanskrit and the other for the sons of the Rājput nobility) The number of students on the

rolls was 3,128, of whom ninety-three were girls, and the daily average attendance during the *six* months (April to September 1906) was 2,474, including seventy-eight girls; the expenditure during the same period exceeded Rs. 26,000.

Of the 212 private schools, no less than 186 were what are known as Mārwārī *posāls*, conducted by *gurūs* who are expected to teach the boys just as much Hindī and arithmetic as will answer the requirements of business; the teaching is on the old lines, no books or writing materials being used and no attempts being made to rank the scholars into classes or forms according to age or proficiency. The number of boys receiving instruction at *posāls* was reported to be 7,387, and twelve of these institutions have received grants-in-aid from the State since 1906. At ten schools kept up by individual Muhammadans or by this community generally the chief study is Urdu, taught by a *maulvi* who, if well-versed in his scriptures, becomes the centre of a large circle of disciples taking lessons in the recitation of the Korān. Instruction is also sometimes given in Arabic and Persian, notably at the *Islāmia madrasa* at the capital, which is attached to a mosque and has been assisted by the Darbār since 1904. The anglo-vernacular school at Pokaran and the vernacular one at Raipur deserve special mention as being the only educational institutions maintained by the Thākurs of Mārwār. The most important of the private schools are, however, to be found at Jodhpur city, *viz.*—(i) the Sardār school, established in 1896 and maintained by the Oswāl Mahājans; (ii) the anglo-vedic *pāthshāla*, which dates from 1897 and is supported by the Srīmāli Brāhmans; (iii) the Sumer school, started by the Māli community in 1898 and called after the Mahārāj Kunwar; and (iv) the Sir Pratāp school, founded in 1887 as a memorial of the visit of Sir Pratāp Singh (now Mahārājā of Idar) to England on the occasion of the jubilee of Her late Majesty, and kept up by the Pancholis. The first is a lower secondary, and the other three are primary anglo-vernacular schools, but all follow the course of instruction prescribed by the department and have more or less intermittently served as feeders of the upper classes of the high school. The Vedic *pāthshāla*, established in 1890, is another institution supported by the Srīmāli Brāhmans, and is entirely devoted to the teaching of Sanskrit; it has presented candidates for the Jaipur College examinations since 1896 and the oriental title examinations of the Punjab University since 1898, and was particularly successful in 1902, when one student headed the list and another occupied the sixth place. All these five schools received substantial contributions from the State when they were started, and the one last mentioned has throughout its existence been the regular recipient of a monthly sum. The Darbār extended the grant-in-aid system to the Sardār and Sumer schools (as well as the *Islāmia madrasa* already noticed) in 1904. Lastly, the United Free Church of Scotland Mission has had a small school for girls at the capital since 1902.

Private schools.

Particulars as to the castes of the scholars are available only for the State institutions, and Brāhmans and Mahājans predominate.

Castes of students.

In the anglo-vernacular schools they are almost equally represented, the percentages being 26·2 and 27·1 respectively; the largest proportion of the former is shown by the schools at Merta town (46·5) and Phalodi (45·7) and the branch school at the capital (35); and of the latter by the institutions at Phalodi (40·2), Jālor (38·8), Bālotra (38·2) and Sojat (35·9). Jodhpur city shows a low percentage of only 5·9 for the Mahājans, the reason being that most of the boys attend either the Sardār school (set up by their caste) or one of the *posāls*. The trading sections of this community place very little value on school training, and even regard it with suspicion as a sure dissolvent of established customs and beliefs; they are generally content with a little knowledge of the vernacular and the native system of arithmetic and accounts for their sons, and if a smattering of English is sometimes thought desirable, it is because telegrams play an important part in business in these days. The *mutsaddī* or official sections of the Mahājans, on the other hand, find that their hereditary claims to Rāj service count less and less, and educational qualifications more and more, when the question of filling up some vacant post arises, so they have responded to the virtue of necessity, but only because it gives them the means of livelihood. It is they who started the Sardār school on the principle of self-help to fortify their position against competing communities; their old learning, which was of the *munshiāna* kind—special to the writer's profession rather than academic—is no longer of much use to them, and they are actively superseding it by an English school education. Musalmān scholars formed 17·6 per cent. of the total attending the anglo-vernacular schools, the institution at Merta Road leading with 39 per cent., but the Rājputs of pure blood still hold aloof, and the few that were found were mostly of the pseudo-Rājput class. The percentage of the Kāyasths or Pancholis is also small—namely 8·2—and this is due, so far as Jodhpur city is concerned, to the existence for several years of a separate caste school (the Sir Pratāp institute).

In the vernacular schools Mahājans are most numerous with 44 per cent., and are followed by the Rājputs (mostly of pure blood) with 27·5, the Brāhmans with 18·6, the Musalmāns with 9·5, and the Kāyasths with four per cent. of the total number of scholars. It would thus appear that, as between anglo-vernacular and vernacular education, the Brāhmans, Kāyasths and Musalmāns go in more largely for the former than for the latter, the proportionate ratios being nearly 3 : 2 for the Brāhmans and almost 2 : 1 for the others, while that for the Mahājans (3 : 5) shows how averse they are to English education in comparison with the other communities. Without distinction between anglo-vernacular and vernacular, the percentages are:—Mahājans 37·3, Brāhmans 21·6, Musalmāns 12·7, and Kāyasths 5·8.

In the above calculations, the primary section of the high school has been left out of account because the proportions according to castes are not available for each section separately, except that the Musalmāns formed just one-tenth of those in the primary grade. Of

the total strength of the school, including lower and upper secondary sections, Brāhmans formed 46·5 per cent., Mahājans and Kāyasths ten per cent. each, and Musalmāns nine. The high proportion of Brāhmans in the premier school of the State shows how far in advance they are of the other communities in appreciating the value of English education, and this is due partly to the maintenance of their "monopoly of learning as the chief buttress of their social supremacy" being a prime necessity as a means of livelihood, and partly because the change from the old to the present system of education is to them comparatively easy. It is the Brāhmans also who swell the ranks of scholars at the Jaswant College, forming more than fifty-seven per cent. of the total, while the Kāyasths, Mahājans and Musalmāns are represented by 18·3, 8·6 and 0·5 per cent. respectively.

Fees.

With but one exception in each case, education at all the State and private institutions is free. At Merta Road a fee of two annas a month is charged if the monthly pay of the boy's parent is between Rs. 5 and Rs. 10, and of four annas if it exceeds Rs. 10, but otherwise nothing is levied. At the high school, youths absenting themselves for more than a month without sufficient reason have had, since 1902, to pay a fine of one rupee on re-admission. Among the aided schools, a nominal fee is taken from non-Srīmāli students who attend the Vedic *pāthshāla*.

Successes at public examinations.

It only remains to notice the successes obtained at public examinations. The Jaswant College, since it was established in August 1893, has passed fourteen students for the degree of B.A. and forty in the Intermediate or First Arts examination. The high school has since 1876 passed nineteen boys for the Entrance examination of the Calcutta University and fifty-six for that of the Allahābād University, as well as sixty-eight boys for the middle English examination of the United Provinces till 1902, and of Rājputāna since.

Newspapers.

The only newspaper published in Jodhpur is the Mārwār Gazette, which has appeared weekly since about 1867-68; it is printed at the State press at the capital, and consists of some eight pages, in English and Hindī, giving a brief account of notable local events, the text of the more important notifications issued by the Darbār, and some extracts from vernacular papers. About two hundred copies are usually issued.

CHAPTER XX.

MEDICAL.

History.

As in other parts of Rājputāna, the practice of medicine was, in former times, mostly in the hands of Baids or Vaidyas (Hindu physicians) and *hakīms* (Muhammadan doctors, chiefly of the Yūnāni school); very few of them were educated, and they knew little of anatomy, and nothing of modern pathology. These men continue to flourish to some extent, and a few are still employed by the Darbār at its medical hall—an institution attached to the palace and having no connection with the State Medical department. The surgeons of olden days were chiefly of the barber class, though amputations were not infrequently performed by Rājput swordsmen who, if they were expert, would cut through the limb with one stroke, the stump being then placed in boiling oil to prevent hæmorrhage. Lastly, there were the Sāthias who practised couching for cataract and still have a great reputation, particularly those of Sojat.

The first medical institution, established in Jodhpur on modern lines, dates from 1853; it consisted of a house at the capital, containing quarters for the Hospital Assistant, a small surgery and two rooms for the sick, and was the only hospital in the State till 1865, when one was opened at Pāli. By 1881, there were seven hospitals and three dispensaries, namely the two hospitals above mentioned and others at Jodhpur (attached to the jail), Nāgaur, Dīdwāna, Pachbhadra and Sāmbhar,—the three last being maintained by the Government of India for the benefit of those employed at the salt-works—while of the dispensaries, one was at Jasol and two at the capital. A reference to Table No. XXXII in Vol. III-B. will show that the number of institutions increased to twenty-two in 1891, thirty-one in 1901, and thirty-two at the present time. Of the last*, twenty-four are maintained by the Darbār, five by the Government of India, and one each by the United Free Church of Scotland Mission, the authorities of the Rājputāna-Mālwā Railway, and the Thākur of Pokaran; again, twenty-five are hospitals, having accommodation for 360 in-patients, and the rest are dispensaries. Complete statistics as to the work done in 1881, 1891 and 1901 are not available, but the popularity of these institutions is clear from the steady increase (*a*) in the number of cases treated and operations performed, and (*b*) in the daily average attendance—see Table No. XXXII. For example, the daily average attendance was about 300 in *1881*, 1,050 in *1901* and 1,599 in *1906*; and the number of patients treated rose from about 21,000 in *1881* to more than 175,000 in *1901* and 210,625 in *1906*.

* See Table No. XXXIII in Vol. III-B.

The State hospitals and dispensaries, including that kept up by the Thākur of Pokaran, are under the supervision of the Residency Surgeon, and are provided with dark rooms for the examination of the eye, ear, throat and nose—the Hospital Assistants having been trained to examine these organs and supplied with special instruments; some of them also possess separate buildings wherein *post-mortem* examinations can be decently conducted. The Darbār spends about Rs. 44,000 a year on its medical institutions, and of this sum about two-thirds represent the pay of the establishment, including allowances to the Residency Surgeon, while the cost of medicines averages nearly Rs. 11,000. In addition, the expenditure on the medical hall, referred to at the beginning of this chapter, is about Rs. 15,000. Management and expenditure.

The following is a brief account of the more noteworthy institutions, all of which are at the capital:— Noteworthy institution.

The Hewson Hospital takes its name after the late Mr. Hewson (who came to Jodhpur in 1882, reorganised the Customs department with conspicuous success, and died in 1886) and is situated in the centre of the city; it was opened on the 15th February 1888, when it took the place of the old hospital (noticed above as having been established in 1853), and has since been constantly enlarged so as to become an up-to-date institution with accommodation for seventy-five in-patients (forty-five male and thirty female). It is well stocked with medical stores and appliances, and has two operation rooms—one for general, and the other for ophthalmic surgery—besides a separate department for out-patients, and a ward for women, more especially for the treatment of lying-in cases; the last was added as recently as 1904 and is under the care of a qualified female Hospital Assistant, who also attends to maternity cases at private houses free of charge. Hewson Hospital.

The Jaswant Hospital was established in memory of the late Mahārājā, and is solely for females; it is located in the city in a building which was originally a palace (the *Taleti-kā-mahal*), and was opened by the Countess of Elgin on the 24th November 1896. Accommodation is provided for fifty in-patients, and the institution has almost continuously been under the management of a qualified lady doctor; much useful work have been done, but the quantity thereof shows a falling off during recent times, namely an annual average of 9,293 cases treated and 631 operations performed during the four years 1897-1900, and of 4,338 cases and 342 operations since. In 1906, 4,381 cases (220 being those of in-patients) were treated and 374 operations were performed, and the cost of maintaining the hospital was Rs. 7,704. Jaswant Hospital.

The Mission Hospital was opened on the 14th July 1885, and was considerably altered and extended in 1900 at a cost of more than Rs. 30,000, towards which the Darbār contributed about Rs. 17,000; it contains some forty beds and is a popular institution. The missionary in charge and his assistants visit many people at their own houses in and about the city, and sometimes tour in the districts; about 30,000 cases are treated, and 900 operations performed every Mission Hospital.

year—the expenditure, entirely borne by the Mission, averaging nearly Rs. 2,200.

Lunatic asylum.

A portion of the old jail has been used as a lunatic asylum since 1894, and the inmates are looked after and made as comfortable as possible by male and female warders, the sexes being separated. In 1905-06, twenty-four lunatics were treated, of whom five were cured, three were made over to their relatives, and sixteen remained under observation; the asylum being worked as part of the jail, the maintenance charges appear in the accounts of the latter institution. Since 1905 an arrangement has been made with the Government of India by which dangerous lunatics from Rājputāna can at all times be transferred to the asylum at either Lahore or Agra, and of the sixteen shown above as under observation at the end of March 1906, ten were actually at Lahore. Insanity is, however, not very common in Jodhpur, only 460 lunatics (or rather more than two persons in every 10,000) having been enumerated in 1901, and the forms most frequently met with appear to be mania, melancholia and dementia, caused by mental strain and intemperance; idiocy is extremely rare.

Leper asylum.

At Kāga, one of the suburbs of Jodhpur city, the cenotaphs erected on a cremation ground afforded (till 1905) shelter to a number of lepers who congregated there from the surrounding country and received food from the charitable townsfolk; a regular asylum has since been built at Mandor, and now contains about fifty inmates, all of whom are fed and clothed at the cost of the State. According to the census returns, the disease is on the wane, there having been 534 lepers in 1891 and 246 in 1901, but this decrease of fifty-four per cent., which was most marked among the males, was probably due partly to the famine of 1899-1900 and partly to greater care on the part of the enumerating staff in distinguishing true leprosy from leucoderma and certain skin affections.

Vaccination.

Vaccination appears to have been first introduced in Mārwār in 1866 when 3,933 persons were vaccinated—2,225, or more than fifty-six per cent., successfully; the staff, which originally consisted of three operators, was increased to nine (under an Inspector) in 1870, and to eleven in 1875, and these men successfully vaccinated 18,830 persons (or 10·7 per mille of the population) in 1881 at a cost of Rs. 1,709, or an average of seventeen pies per successful case. Four years later, the present Mahārājā was vaccinated, and this greatly increased the popularity of the operations, especially among the upper classes; the Thākurs were induced to keep their own vaccinators, but as this scheme did not work well, they subsequently agreed to contribute towards the cost of the general staff. In this way, ample funds became available, and the number of vaccinators rose gradually from fifty in 1885 to eighty in 1888, while the annual number of successful operations averaged nearly 50,000 during this period. In 1889 the whole system was reorganised; the State was divided into six circles, each under an Assistant Superintendent, the staff of vaccinators was increased to eighty-four (and two years later to eighty-six), and a Deputy Superintendent was appointed. Of the vaccinators, one was

a Brāhman female told off to work among families keeping close *pardā*, while two were sweepers who confined their attentions to the lower castes.

During the next ten years (1890-91 to 1899-1900) operations flourished, and on the average 80,610 persons were successfully vaccinated annually at a cost of Rs.11,395 or about twenty-seven pies per head; indeed in 1898-99, as many as 89,054 successful operations were performed by eighty-four vaccinators. Since then, the staff has been considerably reduced and less work has been done, the annual average number of successful vaccinations for the five years ending 1904-05 having been 48,269; the annual expenditure for the same period was Rs. 5,220. The establishment employed in 1905-06 consisted of a Deputy Superintendent, an Assistant Superintendent and twenty-one vaccinators, under the control of the Residency Surgeon as Superintendent; in the above year 54,580 persons (or 28·2 per mille of the population) were successfully vaccinated at a cost of Rs. 3,850 or an average of fourteen pies per case. Some further details will be found in Table No. XXXIV.

Vaccination is compulsory, or nominally so, throughout the State, and is on the whole popular except, perhaps, in a few Mīnā villages; it has done much to mitigate the ravages of smallpox, and most of the people now recognise the benefits it confers. Arm-to-arm vaccination was the method in vogue in earlier years, but it has been supplanted by buffalo calf lymph because parents prefer the latter and object to giving lymph from their children to others.

Sale of quinine.

The system of selling quinine in pice packets at post offices was introduced in January 1895; these packets were at first supplied to postmasters by the Residency Surgeon, but since 1902 have been obtained direct from the Superintendent of the Alīgarh jail in the United Provinces. In 1900-01, when there was much malarial fever, 24,480 packets of 5-grain doses were sold, while in 1905-06* only 2,504 packets of 7-grain doses were disposed of.

*4,940 packets in 1906-07.

CHAPTER XXI.

SURVEYS.

The whole State, with the exception of the western portion of Mallāni, was topographically surveyed by the Survey of India, mostly on a scale of one inch to the mile, at different times between 1865 and 1891. The operations of the Great Trigonometrical Survey of India extended to Mārwār in 1872—74, and the territory lies within what is known as the Jodhpur Meridional Series. Lastly, a cadastral survey was carried out by the Darbār with the plane-table between 1883 and 1893, the agency employed being partly local and partly foreign. The area, as calculated at the time of the settlement, was 34,963 square miles. The maps, which are on a scale of one inch to 528 feet or ten inches to the mile, show, for the entire State, the limits of each village as well as hills, rivers, tanks and habitations. In the *khālsa* villages a regular field survey was made, the soils being classified and records of rights prepared, and the maps, etc. relating to this area are kept up to date.

CHAPTER XXII.

MISCELLANEOUS.

Bāli Hukūmat.—A district in the south-east of the Jodhpur State, with an area of 837 square miles, of which about one-fourth is *khālsa* (*i. e.* directly under the management of the Darbār). In 1901 it consisted of one town (Bāli) and 160 villages, containing 96,194 inhabitants, of whom seventy-eight per cent. were Hindus and fifteen per cent. Jains; the principal castes were Mahājans (16,230); Rājputs (9,283); Brāhmans (9,050); Jāts (7,456); Balais (7,082); Sīrvis (5,232); and Mīnās (5,023). The district, which is traversed from north-east to south-west by the Rājputāna-Mālwā Railway, is one of the most fertile in the State; wells abound, and barley, cotton and wheat are extensively grown. The yearly receipts from the land (*khālsa*) average about Rs. 57,000. At the village of Bijāpur are the remains of an ancient city called Hathūndi or Hastikūndi, the earliest seat of the Rāthors in Rājputāna. A stone inscription found here bears the date 997 A.D. and tells of five Rāthor Rājās who ruled at this place in the tenth century, namely Harivarman, Vidagdha (916), Mammata (939), Dhavala, and Bālaprasād. Other objects of interest are the Jain temples at Dāntiwāra, Dāyalāna and Khinwal, and the Nīlkanth Mahādeo temple at Nāna, all of which are said to be old and to contain some fine carving, but they have not yet been professionally examined. A step-well in very fair order at Bhadūnda Purohitān possesses an inscription dated 1045 A.D. which mentions some chiefs of the Paramāra clan, and another inscription (of 1762 A. D.) in a well at Khinwal refers to Rānā Ari Singh II of Mewār and some of the Thākurs of Chānod.

The district of Bāli which, with that of Desuri immediately to the north and north-east, forms the tract known as Godwār, was formerly held by the Chauhāns and next by the Rānās of Udaipur; it passed finally into the possession of the Jodhpur chiefs towards the end of the eighteenth century. The principal *jāgīr* estates in Bāli are those of Chānod and Bera, both held by nobles of the second class. The former was conferred by Mahārājā Bijai Singh in 1772 on a Rāthor Rājput of the Mertia sept named Bishan Singh, whose descendant, Gulāb Singh, is the present Thākur; it now consists of twenty-six villages yielding an annual revenue of about Rs. 30,000, out of which a tribute of Rs. 2,480 is paid yearly to the Darbār. The other estate (Bera) was originally granted by one of the Rānās of Udaipur to his kinsman, Shekhojī, a Sesodia of the Rānāwat sept, and when Godwār passed into the hands of the chiefs of Jodhpur, the Thākur transferred his allegiance to the latter; the present holder, Sheonāth Singh, owns villages worth about Rs. 18,000 a year, but pays no tribute.

Bāli Town.—The headquarters of the district of the same name, situated 1,013 feet above the sea on the left bank of a stream called the Mitri in 25° 11′ N. and 73° 18′ E., about five miles south-east of Fālna station on the Rājputāna-Mālwā Railway. Population (1901) 5,186. The town is walled, and possesses a fort (in good repair), a post office, a vernacular school, two private Mārwārī schools, and a hospital with accommodation for six in-patients. The houses are mostly substantial brick buildings with tiled roofs, the people being generally well-to-do. Two temples are deserving of mention, namely that to Mokal Mātā, said to have been built by Kumārapāla Chālukya—of whose time it possesses an inscription dated 1159 A.D.—and a Jain temple, the history of which is not known, but it has an inscription of 1187 A.D.; both are in daily use and in a fair state of preservation.

Bilāra Hukūmat.—A district situated in the centre of the eastern half of the Jodhpur State, having an area of 792 square miles of which about one-third is *khālsa*, the rest being held on favoured tenures by *jāgīrdārs* and others. In 1901 it consisted of two towns (Bilāra and Pīpār) and eighty-eight villages, containing 57,794 inhabitants, of whom more than eighty-six per cent. were Hindus; the population was found to have decreased by thirty-two per cent. since 1891. The principal castes enumerated at the last census were Jāts (6,762); Brāhmans (5,947); Mahājans (5,924); Rājputs (5,026); Balais (4,048); Mālis (3,143); and Sīrvis (2,733). The river Jojri flows through the centre of the district from the north-east, while the Lūni itself traverses the southern portion and has been dammed near Pichiāk so as to form a fine artificial lake, called the Jaswant Sāgar; further, the soil is productive, water is plentiful, and the tract is among the most favoured in the State. The *khālsa* lands are 264 square miles in extent, and of these, about 210 square miles are available for cultivation; the average annual area cultivated during the last five years has been nearly seventy square miles, of which one-third was irrigated, chiefly from wells. The average areas under the principal crops are approximately in square miles:—*jowār* 17·5; wheat 15; *bājra* 11·3; barley 5; oil-seeds 4·5; and cotton 2·3; gram, maize, *manduā* and tobacco are also grown. The land revenue of the district (*khālsa* portion) is about Rs. 1,54,000 yearly. The manufacture of an inferior kind of salt called *khāri* which, in former days, gave employment to a large number of people, is now, under the agreement of 1879 between the Darbār and the Government of India, only permitted at the depressions at Pichiāk and Mālkosni, and the out-turn in any one year is restricted to 20,000 maunds—a figure which is seldom approached.

The principal *jāgīr* estates in Bilāra are Khejarla and Sāthin, held by Bhāti Rājputs who are nobles of the second class. Khejarla was first granted by Mahārājā Mān Singh to one Gopāl Dās in 1803, and the name of the present Thākur is Mādho Singh; the estate now comprises eight villages yielding about Rs. 24,000 annually, and the tribute payable to the Darbār is Rs. 1,984. The Sāthin estate is

very similar in every way, having been conferred on Sakti Dān by Mahārājā Mān Singh in 1803, and now consisting of eight villages worth about Rs. 21,000 a year, for which the present holder, Thākur Mohan Singh, pays an annual tribute of Rs. 1,728 to the Darbār.

Among places of archæological interest, besides Pīpār, are Kāpardā and Buchkalā. The former has a Jain temple which, though it cannot claim to have been constructed prior to the sixteenth century, is of unusual height inasmuch as it can be seen from a distance of five miles. In the village of Buchkalā will be found two temples, one to Mahādeo and the other to Pārbatī, but, while the first is in the better state of repair, the other is not only more interesting to the architect but is important as possessing on one of its pillars an inscription which refers itself to the rule of one Nāgabhatta, son of Vatsarāja, and is dated 815 A.D.

Bilāra Town.—The headquarters of the district of the same name, situated on the left bank of a river called the Raipur Lūni (a tributary of the Lūni) in 26° 11′ N. and 73° 43′ E., about forty-five miles east of Jodhpur city and twenty north-west of the Chandāwal and Guriya stations on the Rājputāna-Mālwā Railway. Population (1901) 8,695. It is said to take its name from a traditional founder, Rājā Bāl, and is the seat of the spiritual head (styled *Dīwān*) of the Sīrvi community, a fact which adds greatly to its importance. The town is walled, and possesses a post office, a vernacular school, a Mārwāri *posāl*, and a hospital with beds for eight in-patients; but it is rather low-lying, and malarial fevers and diseases of the spleen are not uncommon. A religious fair, lasting for only one day, is held yearly towards the end of March on the banks of the Bānganga rivulet about three miles to the north, and is usually attended by five or six thousand persons. The story runs that Rājā Bāl was in the habit of giving great feasts at this spot, and that the deity (Gangā) once appeared to him in a dream and told him that, if an arrow were shot into the spring, she would present herself, and the water would become as sacred as that of the Ganges. The Rājā of course obeyed, and the stream—called Bānganga after *bān*, "an arrow"—has ever since been considered very holy, especially by the poorer classes.

Pīpār.—A town in the Bilāra district, situated in 26° 23′ N. and 73° 33′ E., on the left bank of the Jojri river (a tributary of the Lūni), about thirty-two miles east of Jodhpur city and seven south-east of Pīpār Road station on the Jodhpur-Bīkaner Railway. Population (1901) 6,785. The town, which forms part of the estate of the Thākur of Nīmāj, is of some commercial importance and is noted for its dyed cloths; it is surrounded by a mud wall, and possesses a small fort, four private schools (in two of which English is taught), and a post office. The objects of antiquarian interest are three in number, namely a couple of temples inside the town, and a *kūnd* or step-well with a small broken shrine outside. Of the temples, that to Vishnu is the older, and portions appear to belong to the eighth century; the pillars and the door of the shrine have, however, been so thickly coated with plaster that the beauty of their deep artistic

carving is completely marred, and the interior is so dark that it is unsafe to walk there without a lamp. The other fane is sacred to the goddess Pīplād Mātā, whose image will be found in the shrine; the whole building, with the exception of the domical roofs, is certainly old.

Tradition assigns the foundation of Pīpār either to a king of the Paramāra Rājputs prior to the Christian era or to a Pāliwāl Brāhman called Pīpa. Tod tells us that the latter was in the habit of carrying milk to a deity of the Serpent Race (the Takshakas or Nāgās), whose retreat was on the banks of a lake, and who deposited two pieces of gold in return for the Pāliwāl's offering. Being compelled to go to Nāgaur, the latter instructed his son to perform his charitable office, but the youth, deeming it a good opportunity of becoming master of the treasure, took a stick with him and, when the serpent issued forth for its accustomed fare, he struck it violently; the snake, however, being scotched, not killed, retired to his hole. The young Brāhman related the adventure to his mother who, dreading the vengeance of the deity, arranged to send him away the next day to his father, but was horrified, when she went to call the boy in the morning, to find, instead of him, the huge serpent coiled up in his bed! Pīpa, on his return, was inconsolable, but, continuing his libations of milk, at length appeased the scaly monster who showed him where the gold was stored and commanded him to raise a monument which would transmit a knowledge of the event to future ages. Hence arose Pīpār from Pīpa the Pāliwāl, while the lake was named Sāmpu after the serpent. [*Progress Report of the Archæological Survey of India, Western Circle*, for the year ending 31st March 1907.]

Desuri Hukūmat.—A district in the south-east of the Jodhpur State, having an area of 706 square miles (of which about one-fourth is *khālsa*) and consisting (in 1901) of one town (Sādri) and 160 villages. At the last census the population numbered 67,764—chiefly Hindus (more than eighty-two per cent.) and Jains (fourteen per cent.)—and the principal castes were Mahājans (10,994); Brāhmans (8,176); Rebāris (5,383); Rājputs (5,316); Sīrvis (5,086); Balais (5,039); Kumhārs (3,573); and Mīnās (2,573). As regards physical characteristics, soils and agriculture, the district resembles Bāli which it adjoins, and it is consequently one of the best in the State; its early history is also the same as that of Bāli, the two tracts having formerly been called Godwār. The yearly receipts from the land (*khālsa* portion) average about Rs. 58,000. The Arāvalli hills form the eastern border, and the forests in this direction contain tigers, panthers, wild hogs, *sāmbar*, and occasionally black bears; marble of a rather coarse variety is quarried at Sonāna, and is found near Ghānerao and at a few other places.

Desuri became a separate *hukūmat* in 1895 with its headquarters at the village of the same name, situated 1,587 feet above the sea on the right bank of a stream called the Sukri, and about eighteen miles south-east of Jawālia station on the Rājputāna-Mālwā Railway. Population (1901) 2,099. The village is walled and

stands at the foot of a hill, the summit of which is crowned by a small fort; it possesses a post office, a private school of the indigenous type, a hospital with accommodation for four in-patients, and a shooting-box with garden attached. The sport in the neighbourhood made the place a favourite resort of the late chief, and the present Mahārājā occasionally spends a fews days here.

The district is of great archæological interest. The remains at Nādol and the famous Jain temple at Rānāpur are described in separate articles below, but Nārlai (a village four miles north-west of Desuri) is also deserving of mention as possessing two Jain temples, both handsome edifices in good repair and daily use. One, dedicated to Neminăth, bears an inscription dated 1386 A.D., while the other, to Adināth, has an inscription of 1541; on the top of a hill to the north (1,804 feet above sea-level) is a colossal stone statue of an elephant.

The principal *jāgīr* estate in the district is Ghānerao, which consists of thirty-seven villages held by one of the first class nobles who is a Rāthor Rājput of the Mertia sept. The annual income is about Rs. 37,000, and the tribute payable to the Darbār Rs. 3,008. In former times, when this part of the country belonged to the Rānās of Udaipur, the estate was conferred on some ancestor of the present Thākur, and Tod tells us that it was the peculiar duty of the Ghānerao house to defend the fort of Kūmbhalgarh (in Mewār) and that several Thākurs shed their blood in maintaining it against the Mughals. "Even now," he wrote in 1819, "such is the inveteracy with which the Rājput clings to his honours that, whenever the Ghānerao chief, or any of his near kin, attends the Rānā's court, he is saluted at the *porte*, or at the *champ de Mars*, by a silver mace-bearer from the Rānā with the ancient war-cry 'Remember Kūmbhalmer'; and he still receives on all occasions of rejoicing a *khilat* from that prince." These customs are now obsolete; it would appear, however, that the place allotted to the Thākurs in the Mahārānā's court was fifth in order of precedence, and that it is still left vacant. When Godwār passed into the hands of the Jodhpur chiefs, Vīram Deo was Thākur, and Mahārājā Bijai Singh confirmed him in possession by a grant dated 1772; his successors have been Dūrjan Singh; Ajīt Singh; Nāhar Singh; Himmat Singh; and Jodh Singh. The principal place in the estate is the village of the same name, situated in 25° 14′ N. and 73° 32′ E., about four miles south by south-east of Desuri; it possesses a fairly large and strong fort, a private indigenous school (Mārwārī *posāl*), a post office, and a temple dedicated to Mahāvīra—a lofty building of considerable architectural skill. Population (1901) 2,874.

Nādol.—A village in the Desuri district, situated in 25° 22′ N. and 73° 27′ E., about eight miles from Jawālia station on the Rājputāna-Mālwā Railway. Population (1901) 3,050. The place is of historical interest as the former seat of a powerful branch of the Chauhān Rājputs, and as the capital of Godwār. Towards the end of the tenth century, Lākhan or Lakshman Rāj, a younger son of Wāk-

pati Rāj, the Chauhān Rao of Sāmbhar, settled here, and his descendants ruled at Nādol for about two hundred years till defeated and driven out by Kutb-ud-dīn. Subsequently it was held by the Rānās of Udaipur till towards the end of the eighteenth century when, along with the district of Godwār, it passed into the possession of the chiefs of Jodhpur. The village is surrounded by a low rubble wall and has several gates, the oldest of which—the Sūraj Pol—is said to have been built by Lākhan. To the west is a dilapidated old fort with square towers of primitive design, standing on the declivity of a ridge, and inside it is an extremely handsome Jain temple of Mahāvīra, built of a light-coloured limestone (obtained from the Sonāna quarries, some eight miles off) and richly carved. This temple contains three inscriptions, each dated 1609 A.D. and recording its construction from eleemosynary funds. The other numerous and interesting remains found here include (*i*) the pillared temple called Khetla-kā-sthān, which is the most remarkable and probably the oldest, but only eight massive columns now remain; (*ii*) the Someshwar Mahādeo temple with three inscriptions, dated respectively 1086, 1141 and 1143 A.D.; and (*iii*) the temple of Somnāth with inscriptions of 1156 and 1162 A.D. A little to the east, on an extensive mound thickly covered with fragmentary pottery and burnt bricks, are the ruins of the ancient Nādol (Jūna Khera), among which four temples and an exquisitely carved stone *toran* or gateway may be singled out. [J. Tod, *Rājasthān*, Vol. I, pages 696—98; and A. Cunningham, *Archæological Survey of Northern India*, Vol. XXIII, pages 91—98.]

Rānāpur (or *Rāmpura*).—The site of a celebrated Jain temple in the Desuri district of the Jodhpur State, Rājputāna, situated in 25° 7′ N. and 73° 28′ E., about eighty-eight miles south-east of Jodhpur city, and about fourteen east by south-east of Fālna station on the Rājputāna-Mālwā Railway. The temple was built in the time of Rānā Kūmbha of Mewār (fifteenth century) in a lonely and deserted glen running into the western slopes of the Arāvallis and is still nearly perfect. It is most complicated and extensive in design, covering a platform measuring 200 by 225 feet exclusive of the projections on each face. In the centre stands the great shrine, not, however, occupied as usual by one cell but by four, in each of which is placed a statue of Adināth, the first of the Jain saints. On a second storey are four similar niches opening on to the terraced roofs of the building. Near the four angles of the court are four smaller shrines and around them, or on each side of them, are twenty domes supported by about 420 columns. The central dome in each group is three storeys in height and towers over the others; and that facing the principal entrance is supported by the very unusual number of sixteen columns, and is thirty-six feet in diameter, the others being only twenty-four feet. Light is admitted to the building by four uncovered courts, and the whole is surrounded by a range of cells, each of which has a pyramidal roof. Internally, the forest of columns produces endless variety of perspective with play of light and

shade. A wonderful effect also results from the number of cells which, besides being of varied form, are more or less adorned with carvings. "The immense number of parts in the building and their general smallness prevent its laying claim to anything like architectural grandeur; but their variety, their beauty of detail—no two pillars in the whole building being exactly alike—the grace with which they are arranged, the tasteful admixture of domes of different heights with flat ceilings, and the mode in which the light is introduced, combine to produce an excellent effect." Imbedded in a pillar at the entrance to the temple is a marble slab with an inscription giving the rulers of Mewār from Bāpā Rāwal to Rānā Kūmbha. [J. Fergusson, *History of Indian and Eastern Architecture* (1899), pages 240—42.]

Sādri.—The only town in the Desuri district, situated in 25° 11′ N. and 73° 27′ E., close to the Arāvalli hills and the Udaipur border, and about eighty miles south-east of Jodhpur city. Population (1901) 6,621. Besides a post office, an anglo-vernacular school, and two Mārwāri *posāls*, Sādri possesses a step-well (constructed, according to the inscription it bears, in 1598 in the time of Rānā Amar Singh I of Mewār) and several handsome temples. Of the latter, the oldest appears to be that of Mahādeo which has two inscriptions dated respectively 1086 and 1167 A.D.—the first mentioning Jojjalla and the second Kelhana, both of whom were Chauhān rulers of Nādol; the temple of Jogeshwar, with two well-preserved inscriptions of 1173 and 1193, shows much fine carving, and a Jain shrine built in 1440 (in Rānā Kūmbha's time) by one Dhāna Sāh, is also deserving of notice.

Dīdwāna Hukūmat.—A district situated in the north-east of the Jodhpur State, with an area of 1,136 square miles, of which barely 200 square miles are *khālsa* or under the direct management of the Darbār. In 1901 it consisted of one town (Dīdwāna) and 113 villages, containing 44,612 inhabitants, of whom more than eighty-three per cent. were Hindus and fifteen per cent. Musalmāns; the principal castes were Brāhmans (4,723); Rājputs (4,573); Jāts (4,223); Balais (3,329); and Mahājans (2,700). The soil is sandy and the water of the wells mostly brackish; consequently, the district is not very fertile. Agricultural statistics are forthcoming only for the *khālsa* villages, in which about 184 square miles are available for cultivation, and of the latter, some three-sevenths are usually cultivated. Of the cropped area, *bājra* generally occupies about fifty-six, *jowār* five, and the minor millets and pulses nearly thirty-four per cent., while barley and wheat are ordinarily grown in 270 and 64 acres respectively. The land revenue realised by the Darbār averages Rs. 30,300 yearly.

The principal *jāgīr* estate in the district is Lādnun which, in 1901, formed part of the Nāgaur *hukūmat*; it consists of the town of the same name and six villages, held by one of the second class nobles who belongs to the Jodha sept of the Rāthors. The annual income is about Rs. 20,000, and the tribute payable to the Darbār

Rs. 1,600. The estate was originally granted by Mahārājā Bijai Singh in 1782 to Sheodān Singh, and is now held by Thākur Anand Singh. The town of Lādnun is situated in 27° 39′ N. and 74° 24′ E., about 130 miles north-east of Jodhpur city and within four miles of the Bīkaner border. Population (1901) 8,064. The place is the home of some of the wealthy Mārwārī merchants of Calcutta and other cities, and is locally famous for the manufacture of gold ornaments; it has a post office and about half a dozen private schools, in one of which English is taught.

Dīdwāna Town.—*The headquarters of the district of the same name, situated in 27° 24′ N. and 74° 35′ E., about 130 miles north-east of Jodhpur city and thirty north by north-west of Makrāna station on the Jodhpur-Bīkaner Railway. Population (1901) 9,410.* The place appears to be of considerable antiquity and is said to have been in existence for about two thousand years; it is related that on one occasion, when an excavation was being made, a stone idol was found bearing the date of *Samvat* 252 (or 195 A.D.), and in digging wells or the foundations of new houses, articles of pottery have been discovered twenty feet from the surface. The town was formerly called Drūdwānak, and was held, first by the Chauhān kings of Sāmbhar, next by the Mughal emperors, next by the Jodhpur and Jaipur States jointly, and then (for a short time) by the Nawāb of Jhūnjhunu (in the Shekhāwati district of Jaipur) till it was acquired by Mahārājā Bakht Singh of Jodhpur in the middle of the eighteenth century. It is surrounded by a substantial stone wall, and contains many fine houses, a post office, an anglo-vernacular primary and a vernacular school, four private schools, and a couple of hospitals—one maintained by the Darbār, and the other by the Government of India for the benefit of those employed on the salt-lake—which together have accommodation for twelve in-patients. Among buildings of archæological interest may be mentioned a mosque said to have been built by Akbar and possessing a well-preserved Arabic inscription, several old temples, and some humble looking cenotaphs bearing inscriptions dating from the ninth century. About a mile off is a place called Gūda, where there are some fine old temples and buildings belonging to the Sādhus of the Niranjani sect, and where a small fair is held yearly. Lastly, at Daulatpura, a village about four miles to the south-east, a copper-plate, inscribed with an important historical record, was found a few years ago; it is dated Vikrama *Samvat* 953 or A. D. 896 (in the reign of Bhojadeva, king of Mahodaya or Kanauj), and has been published in the *Epigraphica Indica*, Vol. V.

Immediately to the south and south-west of the town of Dīdwāna is a salt-lake, leased to the Government of India in 1878 for an annual sum of two lakhs. The valley in which the source lies is about 3½ miles in length by 1½ in breadth, running south-west and north-east, and, according to tradition, was once a river which flowed from the north-west and became choked with sand higher up in its course; about half a mile at each end of this valley is separated from

the central portion by earthen embankments thrown across, and the central section, which forms the source now worked, is thus about $2\frac{1}{4}$ miles in length. The bed is composed of black tenacious mud, very similar in appearance to that of the lake at Sāmbhar, and beneath it is a stratum of strong brine, varying in density from about 20° Beaumé to very nearly the saturation point. Some water collects annually during the rainy months, but it evaporates rapidly, leaving a thin crust of salt over a small area in the centre.

The methods of manufacture are exceedingly simple, and are identical with those followed in olden days. Wells are dug in the bed until the brine springs are reached at a depth of about twelve feet from the surface, and the brine is then lifted by a weighted pole and bucket into evaporation pans of rectangular shape, which are prepared by removing the mud of the surface to a depth of from six to twelve inches and roughly levelling the exposed area. At first, the bed of the pan absorbs nearly the whole of the brine, and for a few years the out-turn is small in quantity and discoloured by the black mud, but gradually large crystals of a species of sulphate of soda form and increase in number yearly until their accretions constitute a solid and hard bed—so hard that a pickaxe would be needed to break through it. When the bed has consolidated in this manner, a pan is capable of producing clean white salt in large quantities; brine is run into it from the well to a depth of two or three inches, and as salt forms, it is scraped up into low ridges with a wooden instrument. The collection of the salt into ridges is steadily carried on from the time precipitation first commences until the crop is ready, the position of the ridges being changed daily, so that all the crystals may be immersed in the brine; in this way the crystals increase in size, and many of them adhere together in lumps about as large as small marbles. When it is found that the salt in a pan has sufficiently developed as regards the size of its crystals, and such a quantity has formed as to render the daily moving of the ridges laborious, it is collected in heaps in the pan and then removed to a place of storage on the edge of the source.

Dīdwāna salt contains from 95 to 98 per cent. of chloride of sodium, and is white and clean, but, owing to the high specific gravity of the brine and rapid precipitation, its crystals are always small. Since the Government of India assumed management in 1878, about 365,000 tons of salt have been produced here, and the average annual out-turn for the last ten years has been nearly 9,600 tons, of which about four-fifths are exported to the Punjab and the rest is consumed in Rājputāna. The number of pans varies from time to time, but they may be divided into two groups—the one (and the larger) being at the southern, and the other at the western edge of the depression; each pan is usually about eighty feet square, and should produce from ten to twelve tons of salt every fortnight or so. Most of the wells and pans now in use have been in existence for very many years, and it has hardly been found necessary to construct new ones; the supply of brine is abundant and inexhaustible, and in the dry

climate of the desert manufacture can be carried on continuously for nine months in the year, but, as a rule, work is confined to about two or three months. [F. Ashton, *The Salt Industry of Rājputāna* in *The Journal of Indian Art and Industry*, Vol. IX, January 1901.]

Jaitāran Hukūmat.—One of the eastern or submontane districts of the Jodhpur State, having an area of 959 square miles (of which only about one-twentieth is *khālsa*) and containing two towns (Jaitāran and Nīmāj) and 116 villages. In 1901 the population numbered 67,733, and the principal castes were Mahājans (6,066); Balais (5,800); Sīrvis (5,271); Brāhmans (4,407); Rebāris (3,637); Rājputs (3,432); Gūjars (3,014); and Mālis (3,010). The river Lūni flows through the northern portion of the district, and there are several other streams, such as the Līlri and the Raipur Lūni, all having their source in the Arāvalli hills which form the eastern border; the soil is fertile, wells containing good water are numerous, and both spring and autumn crops are grown. Agricultural statistics are available only for an area of about thirty-six square miles, of which nearly one-third is usually cultivated yearly; the land revenue realised by the Darbār averages Rs. 15,000. Of the numerous *jāgīr* estates, the four most important (Agewa, Nīmāj, Raipur and Rās) are all held by senior nobles of the first class and are noticed separately below.

Agewa.—A *jāgīr* estate in the Jaitāran district, consisting of three villages held by one of the first class nobles who is a Rāthor Rājput of the Udāwat sept, *i.e.* the branch of the Rāthors claiming descent from Udāi Singh, the son of Rao Sūja. The annual revenue is about Rs. 12,000, and a tribute of Rs. 880 is paid yearly to the Darbār. The estate is said to date from 1839, when Mahārājā Mān Singh granted it to Sheonāth Singh; the subsequent Thākurs have been Bakhtāwar Singh; and Bhopāl Singh. The last is the present holder; he was born in 1874 and succeeded by adoption in 1897. The estate takes its name from its chief village, which is situated in 26° 9′ N. and 73° 56′ E., about fifty-five miles east by south-east of Jodhpur city and eleven miles almost due north of Guriya station on the Rājputāna-Mālwā Railway. Population (1901) 1,351.

Jaitāran Town.—The headquarters of the district of the same name, situated in 26° 13′ N. and 73° 57′ E., about fifty-six miles east of Jodhpur city and fourteen north-west of Barr station on the Rājputāna-Mālwā Railway. Population (1901) 4,033. It possesses a post office, a vernacular school, three Mārwārī *posāls*, and a strong fort with massive walls and four large towers. The town is said to have been founded by the Sindhal Rāthors in 1302 and to have been wrested from them by Rao Sūja. According to the *Ain-i-Akbarī*, the place was taken by Saiyid Mahmūd of Bārha and Shāh Kulī Khān Mahram in the third year of Akbar's reign (1558), while the *Akbar-nāmah* says that this happened in 1556, but the emperor soon restored it to the Jodhpur chief— probably to Rājā Udai Singh about twenty-five years later.

Nīmāj.—A *jāgīr* estate in the Jaitāran district, consisting of eleven villages yielding about Rs. 70,000 a year and held by one of the first class nobles of Mārwār who belongs to the Udāwat sept of the Rāthor Rājputs and pays an annual tribute of Rs. 2,808 to the Darbār. The estate is said to have been originally granted by Mahārājā Ajīt Singh in 1708 to Jagrām, and the following is a list of his successors to date:—Kushāl Singh; Amar Singh, who took part in the siege of Ahmadābād in 1731; Kalyān Singh; Daulat Singh; Shambhu Singh; Sūrthān Singh; Sāmant Singh; Sawai Singh; Gulāb Singh; Chhatar Singh; and Prithwī Singh. The last named is the present Thākur, was born in 1888, and succeeded his father in January 1901.

The town of Nīmāj is situated in 26° 9′ N. and 74° 1′ E., nearly sixty miles east by south-east of Jodhpur city and ten north of Haripur station on the Rājputāna-Mālwā Railway. Population (1901) 4,104. It possesses a private school of the indigenous type.

Raipur.—A *jāgīr* estate in the Jaitāran district, consisting of 37½ villages held by one of the first class nobles who, like Agewa and Nīmāj (just mentioned), is a Rāthor Rājput of the Udāwat sept. The annual revenue is about Rs. 66,000, and a tribute of Rs. 3,364 is paid yearly to the Darbār. The estate dates from 1606, when it was granted by Sawai Rājā Sūr Singh to Kalyān Singh, and it has since been held by the following:—Dāyāl Dās; Bāl Rām, who fought at the battle of Fatehābād near Ujjain in 1658; Hardeo Rām, who assisted in defeating the imperial troops at Sāmbhar in 1709; Bhākar Singh, who joined the army that invaded Bīkaner about 1740; Kesri Singh, wounded in the desperate engagement with the Marāthās at Merta in 1790; Fateh Singh; Arjun Singh; Rūp Singh; Mādho Singh; Lachhman Singh; and Hari Singh.

The last named is the present Thākur, was born in 1863, and succeeded in 1879. He resides at the village which gives its name to the estate and is situated on the left bank of the Raipur Lūni river, in 26° 3′ N. and 74° 2′ E., close to the old Agra-Ahmadābād road and only two miles north of Haripur station on the Rājputāna-Mālwā Railway. Population (1901) 3,566. The Thākur maintains a vernacular school, and outside the village is a fine tank from which the people obtain their water-supply.

Rās.—A *jāgīr* estate of seventeen villages in the Jaitāran district, yielding about Rs. 60,000 annually; it is held by one of the first class nobles of the Jodhpur State who belongs to the Udāwat branch of Rāthor Rājputs and pays a tribute of Rs. 3,180 a year to the Darbār. The estate was first granted by Mahārājā Ajīt Singh in 1712 to Subh Rām, and his successors have been:—Bakht Singh; Kesri Singh; Bhao Singh; Jawān Singh, who was wounded at the battle of Tonga in 1787; Bhūm Singh; Bhīm Singh; Pratāp Singh; and Fateh Singh. The last named (the present Thākur) was born in 1874, was educated at the Mayo College at Ajmer, and succeeded his father in 1893.

The estate takes its name from the village of Rās, which is situated in 26° 18′ N. and 74° 12′ E., close to the Ajmer border and about sixteen miles from the stations of Kharwā and Beāwar on the Rājputāna-Mālwā Railway; the river Līlri flows within half a mile of the place to the south, and on the west is a ridge of hills attaining an altitude of 1,500 feet above the sea. Population (1901) 3,324.

Jālor Hukūmat.—A district in the south and, to some extent, the south-east of the Jodhpur State, having an area of 1,552 square miles, of which less than one-ninth is *khālsa*. In 1901 it consisted of one town (Jālor) and 252 villages, containing 140,880 inhabitants, of whom eighty per cent. were Hindus; the principal castes were Brāhmans (16,209); Mahājans (15,157); Rājpūts (11,986); Balais (8,518); Mīnās (7,406); Pātels (7,273); and Rebāris (5,071). The country is for the most part flat and sandy, but two notable ranges of hills exist, one west of the town of Jālor where a height of 2,408 feet is attained, and the other about eight miles to the south-east, the highest peak of which is 2,757 feet above sea-level. The river Jawai flows through the centre of the district on its way to join the Lūni, and it has one or two small tributaries such as the Khāri. On the whole, the tract may be described as fairly fertile, the soil being good and wells plentiful in about half of it. The *khālsa* lands are nearly 165 square miles in extent, and the portion thereof available for cultivation is about 146 square miles; during recent years the average annual area cropped has been 48 square miles, of which *bājra* occupied fifty-eight per cent., the minor millets and pulses twenty-three per cent., and wheat and *til* each between four and five per cent., while *jowār*, barley, cotton, maize and tobacco have all been grown to a small extent. The land revenue realised by the Darbār amounts to Rs. 25,100 a year. The principal *jāgīr* estate, Bhadrājan, is described below.

Bhadrājan.—An estate in the Jālor district, held on the *jāgīr* tenure by one of the first class nobles of Mārwār who is a Rāthor Rājput of the Jodha sept, and consisting of twenty-seven villages worth about Rs. 45,000 a year. An annual tribute of Rs. 2,556 is paid to the Darbār. The estate is said to have been granted by Sawai Rājā Sūr Singh in 1596 to Mukand Dās, and has since been enjoyed by Udai Bhān, who took part in the battle of Fatehābād near Ujjain in 1658 and subsequently served under Mahārājā Jaswant Singh on the north-west frontier, where he was wounded; Bihāri Dās; Bāgh Singh; Udai Rāj; Umed Singh; Zālim Singh; Bakhtāwar Singh; Indra Bhān; Sangrām Singh; Pratāp Singh; Sheodān Singh; and Devī Singh. The present Thākur (Devī Singh) was born in 1902 and succeeded his father in 1906.

The principal place in the estate is the village of the same name, situated in 25° 36′ N. and 72° 53′ E., about fifty miles almost due south of Jodhpur city and twenty-two in the same direction from Dūnāra station on the Jodhpur-Bīkaner Railway. Population (1901) 1,644. The old name of the village is said to have been Subhadra-Arjuna-Nagara, and tradition ascribes the con-

struction of one of its temples—that to Subhadra Mātā—to the time of the Pāndavas; there is another handsome temple here, as well as a small fort and a *kūnd* or reservoir in good repair.

Jālor Town.—The headquarters of the district of the same name, situated close to the left bank of a river, which is here called the Sukri but is higher up known as the Jawai, in 25° 21′ N. and 72° 37′ E., about seventy-five miles south of Jodhpur city. It possesses a post office, four schools (in one of which English is taught), and a hospital with accommodation for eight in-patients; and in 1901 it contained 7,443 inhabitants. The principal manufactures are country cloth, camel saddles and prettily engraved drinking vessels of bell-metal; in connection with the latter it may be mentioned that Abul Fazl in the *Ain-i-Akbarī* records the existence of a mine of *jast* (pewter) "in the territory of Jālor which is a dependency of the *Sūbah* of Ajmer." On a hill to the south and entirely commanding the town stands the fort, one of the most famous in Rājputāna. Built early in the Christian era by the Paramāra Rājputs, its walls, composed of huge masses of cut stone, remain even now in a perfect state of preservation, although the place has been many times besieged. The fort is about 800 by 400 yards in extent, and accessible only by an ascent of three miles up a steep and slippery stone roadway, passing three distinct lines of defence, all of considerable strength; it is amply supplied with good drinking water from a couple of tanks within the walls, and possesses several handsome palaces and temples, as well as the tomb of Malik Shāh, a noted Muhammadan saint.

Jālor was held by the Paramāras till towards the end of the twelfth century when the Chauhān Rao Kīrtti Pāl (or Keytu), the fifteenth in descent from Rao Lākhan (or Lakshman Rāj) of Nādol, took it and made it his capital. His grandson Udai Singh surrendered it to Shams-ud-dīn Altamsh about 1210, but it was immediately restored to him under the following circumstances, as related by Hasan Nizāmī in his *Tāj-ul-ma'āsir*:—"The king took his way towards Jālewar by the aid of God, and by reason of the scantiness of water and food it was a matter of danger to traverse that desert, where one might have thought that nothing but the faces of demons and sprites could be seen, and the means of escape from it were not even written on the tablet of providential design. Udai Sāh, the accursed, took to the four walls of Jālewar, an exceedingly strong fortress, the gates of which had never been opened by any conqueror. When the place was invested by Shams-ud-dīn, Udai Sāh requested some of the chiefs of the royal army to intercede for his forgiveness. While the terms of his surrender were under consideration, two or three of the bastions of his fort were demolished. He came with his head and feet naked, placed his forehead on the earth and was received with favour. The Sultān granted him his life, and restored his fortress, and in return the Rai presented respectfully a hundred camels and twenty horses, in the name of tribute and after the custom of service."

About a hundred years after this event, Alā-ud-dīn, after a lengthy siege, captured the place from Kānar Deo Chauhān (third in descent from Udai Singh), and a three-domed mosque, said to have been built by him, is still in good repair and daily use. The Muhammadans appear to have remained in possession till about 1540, when both the fort and district were acquired by Rao Māldeo, but only for a time; the emperor Akbar and his immediate successors undoubtedly held sway here, though not uninterruptedly, and it is interesting to read that an ancestor of the ruler of Pālanpur held the district, as a grant from Aurangzeb, from 1682 till 1689 when, "being unable to withstand the increasing power of the Rāthors of Mārwār," he was "compelled to quit the country and retire to Pālanpur." It is probable that the town and district of Jālor became permanently a part of the Jodhpur State soon after Aurangzeb's death in 1707.

Jaswantpura Hukūmat.—A district in the south of the Jodhpur State, with an area of 1,360 square miles, of which rather less than one-seventh is *khālsa*; in 1901 it consisted of one town (Bhīnmāl) and 198 villages, containing 83,370 inhabitants of whom nearly seventy-seven per cent. were Hindus, ten per cent. Jains and almost ten per cent. Animists (Bhīls and Girāsias). The most numerous castes were Balais (9,682); Mahājans (9,382); Brāhmans (8,927); Rājputs (6,539); Pātels (6,190); Rebāris (5,609); and Bhīls (5,339). The northern portion is flat and sandy, while the southern is much broken up by hills and ravines, and is fairly well wooded, particularly in the south-east, near the village of Jaswantpura. Tigers and black bears are occasionally found in the hills in this direction, and four lions were shot in the vicinity in 1872. Agricultural statistics are available for the *khālsa* villages, having an area of 187 square miles of which about 157 square miles are culturable; the average annual area cropped during recent years has been 34 square miles, only two of which were irrigated, and the principal crops are *bājra*, the smaller millets and pulses, *til* and wheat, occupying respectively about sixty, twenty-six, seven, and five per cent. of the cultivated area. The land revenue realised by the Darbār averages Rs. 27,000 yearly.

The headquarters of the district are at the village of the same name, which is situated in 24° 47′ N. and 72° 28′ E. at the foot of a hill, about thirty miles north-west of Abu Road station on the Rājputāna-Mālwā Railway. It was built in 1883-84, when it took the place of a village called Lohiāna which had to be levelled to the ground on account of the predatory habits of the Thākur (or Rānā, as he was styled) and his Bhīl following; the site is rocky and fairly drained, and it is well laid out with broad streets and substantial houses. Population (1901) 1,297. The place possesses a post office and a vernacular school, but its hospital (established in 1891) has been recently transferred to Bhīnmāl. Immediately to the west is the Sūnda hill, presided over by the goddess Chāmūnda in a rock-cut cave-like temple having a large domed and marble-paved hall, built in 1262 A.D. and containing several inscriptions, the oldest of which

(of the same date as the temple) is important as enumerating nineteen generations and the principal events of the Sonigara (Chauhān) rule. The Sūnda hill attains an altitude of 3,252 feet, but the spot on which the temple stands is on the northern face and is barely 1,400 feet above the sea.

The district of Jaswantpura contains no *jāgīr* estates of imporance, and the only other place of interest (besides Bhīnmāl, which is noticed below) is the village of Ratanpur in the south, where there are said to be a couple of old temples, namely one to Siva built, according to the inscription it bears, by Punapākshadeva, a feudatory of Kumārapāla of Gujarāt, in the middle of the twelfth century, and the other to Pārasnāth, said to have been erected in 1171 A.D., and having two other inscriptions dated respectively 1191 and 1291 of the same era.

Bhīnmāl.—The only town in the Jaswantpura district, situated in 25° N. and 72° 16′ E., about 105 miles south-west of Jodhpur city and fifty north-west of Abu Road station on the Rājputāna-Mālwā Railway. Population (1901) 4,545. It contains a post office, a vernacular school, a Mārwārī *posāl*, and a hospital with accommodation for six in-patients. The principal manufactures are utensils of bell-metal. The old name of the place was Srīmāl or Bhillamāla (the *Pi-lo-mi-lo* of the Chinese pilgrim, Hiuen Tsiang). It was the ancient capital of the Gūjars between the sixth and ninth centuries, but very few traces now remain; it is said to have had several gates, of which the one to the south of the present town—the Gujarātī *darwāza*—is still distinguishable, though in ruins, and from this may be traced, first to the south and then to the western or Pīpaldwāra gate, a long line of mounds which probably covers the ancient site. A dozen old tanks and wells, the stone image of a king seated on a *sinhāsan* (lion-supported throne), and a number of temples are of antiquarian interest; and several Sanskrit inscriptions, referring mostly to the time of the Paramāra and Chauhān rulers, have been found.

Jodhpur Hukūmat.—A district situated almost in the centre of the State of the same name, with an area of 2,896 square miles, of which rather more than one-fifth is *khālsa*; in 1901 it consisted of two towns (Jodhpur city and the suburbs) and 370 villages, containing altogether 235,461 inhabitants. The most numerous castes were Brāhmans (24,907); Jāts (24,732); Rājputs (17,708); Mahājans (14,843); Balais (12,213); Mālis (9,667); Chākars (8,672); and Kumbārs (7,720). In about half of the district wells are plentiful, and both spring and autumn crops are raised; the prevailing soil is *bhūri*, a sandy loam and fairly rich. Of the area available for cultivation in the *khālsa* villages for which returns exist (namely 535 square miles), about one-fourth is usually cultivated every year, the irrigated area averaging but five square miles; and of the land under crop, *bājra* occupies nearly fifty-four, the inferior millets and pulses twenty, *jowār* seventeen, wheat about three, and oil-seeds between one and two per cent., while there are generally a few acres under barley, cotton, gram and tobacco. The land revenue realised by the

Darbār averages Rs. 1,02,000 a year. Sandstone is found in abundance in the vicinity of the capital and at Tīvri and other places, while some of the villages are famous for their dyed and printed cloths.

The principal *jāgīr* estates are Asop (which, being of the first class, is dealt with in a separate article) and Jhālāmand. The latter consists of nine villages worth about Rs. 14,000 a year and is held by a Thākur of the second class, who is a Sesodia Rājput of the Rānāwat sept and pays an annual tribute of Rs. 1,128 to the Darbār; the estate dates only from 1845, when it was granted by Mahārājā Takht Singh to Gambhīr Singh, and the name of the present holder is Zorāwar Singh. Among places of historical or archæological interest (besides Jodhpur city and Mandor, described below), the following are worthy of mention:—(*i*) Arnā; (*ii*) Ghatiāla; (*iii*) Osiān; and (*iv*) Tīvri. Arnā is an ancient place about ten miles south-west of Jodhpur city. On either side of the hills bordering on a valley is a group of old temples which are not later than the eleventh century and are said to have been built by a Paramāra Rājā called Gandharv Sen. Ascending the hill, one finds on the right a small but beautiful temple, with a porch in front of it; inside the shrine is a *lingam* which is still worshipped. Immediately to the north is a series of plain cells, cut in the rock, and beyond it another ancient temple, separated from the cells by a masonry wall. Higher up the hill will be seen a *kūnd* or reservoir, and close by a hall (*sabhāmandap*) without any shrine attached to it; on one of the pillars is an inscription of the eleventh century which tells us that a temple of Namdā Devī was erected on the top of a mountain Hemavamta by a Brāhman whose name is not given. This temple has now disappeared, but the goddess is enshrined in a small modern building on the opposite side of the valley, and a fair is annually held there in her honour. Scattered about in the vicinity are old figures of Brahmā and Siva. Ghatiāla is an old village held jointly by no less than twenty Purohit Brāhmans, and is situated some eighteen miles north-west of Jodhpur city. It possesses two objects of antiquarian interest, both of which lie a short distance to the east. The first is a ruined Jain temple (now known as Mātāji-kī-sāl) which, according to the Prākrit inscription found on one of the slabs, was erected in 861 A.D. by the Parihār king Kakkuka of Maddodara (Mandor); the other is popularly called Khākhu-devlām, and consists of a number of memorial stones (*devlām*), surrounding a prominent red sandstone *lāt* or column, the capital of which is decorated with a quadruple image of Ganapatī, while the lower part of the shaft bears three inscriptions, all of which are dated 861 A.D. One of these inscriptions—the longer of the three—sets forth in Sanskrit prose the genealogy and exploits of the Parihār chief already mentioned, and informs us that he erected two pillars, one at Mandor (of which no trace remains) and the other at Rohimsaka (which was doubtless the old city that once stood here). Another inscription tells us that Rohimsaka was formerly invested by the Abhīras (the Ahīrs of the present day) and was consequently deserted by good people, but Kakkuka inflicted a crushing defeat on them and, by establishing a

market and building many houses, induced the Brāhmans, warriors and merchants to live and settle there. There seems little doubt that the Parihār chief raised this column of fame (*kīrtti-stambh*) in order to commemorate his victory over the Abhīras. The village of Osiān is situated about thirty miles almost due north of Jodhpur, and is said to have been the original home of the Oswāl Mahājans. It literally abounds with ancient fanes, but the most noteworthy are (*i*) the temple of Sachiyā Māta, which is perched on an eminence and was built by Uppal Deo Paramāra in probably the eighth century, but it has subsequently undergone such extensive repairs and restorations that it cannot, as it stands, be earlier than the thirteenth century; (*ii*) a Jain temple with a huge image of Mahāvīra, which was originally constructed in the time of the Parihār king, Vatsarāja, *i.e.* about 783 A.D. To the north-east of the village stands a memorial stone bearing the date 895 A.D., and the tops of many others are visible above the sand in the vicinity. Tīvri is remarkable only for an old temple known as that of Khokri Mātā, which is believed to belong to the ninth century; the walls are plain, but the spire shows fine carving. [A fuller account of Arnā, Ghatiāla, Osiān and Tīvri will be found in the *Progress Report of the Archæological Survey of India, Western Circle*, for the year ending 31st March 1907.]

Asop.—An estate of seven villages in the Jodhpur district, held on the *jāgīr* tenure by one of the first class nobles of Mārwār who is a Rāthor Rājput of the Kūmpāwat sept, or the branch of the family claiming descent from Kūmpa, a brother of Rao Jodha. The yearly revenue is about Rs. 30,000, and an annual tribute of Rs. 3,120 is paid to the Darbār. The estate was first granted in 1725 by Mahārājā Abhai Singh to Kani Rām, who was wounded six years later at the siege of Ahmadābād; his successors have been Dalpat Singh; Mahesh Dās, wounded at the battle of Merta in 1790; Ratan Singh; Kesri Singh; Bakhtāwar Singh; Sheonāth Singh; and Chain Singh. The last is the present Thākur; he was born in 1861, succeeded by adoption in 1873, and is a member of the State Council.

The principal place in the estate is the village of the same name, situated in 26° 48′ N. and 73° 35′ E., about fifty miles north-east of Jodhpur city and fourteen north-west of Gothan station on the Rājputāna-Mālwā Railway. Population (1901) 2,938. There are two schools of the indigenous type, and a post office here.

Jodhpur City.—The capital of the State and the headquarters of the district of the same name, situated in 26° 18′ N. and 73° 1′ E., and distant by rail about 380 miles from Delhi, 590 from Bombay and 1,330 from Calcutta. The population of the place (including the suburbs) was 63,329 in *1881*; 80,405 in *1891*; and 79,109 in *1901*; and in the two years last mentioned between seventy-six and seventy-seven per cent. of the people lived within the city walls. In 1901 Hindus formed more than seventy-three, Musalmāns about twenty, and Jains five per cent. of the total population. Of the inhabitants of the city, 8,438 were Brāhmans, 5,827 Mahājans; 3,337 Rājputs (including 230 Musalmāns); 2,846 Jāts; 2,696 Chākars (of

whom twenty-seven were Musalmānīs); 2,157 Kāyasths; and 2,032 Mālis; similar figures are not available for the suburbs.

Jodhpur takes its name from Rao Jodha who founded it in 1459; the old wall with four gates built by him is now included within the limits, and is situated in the south-west of the modern city which lies on sloping ground in the form of a horseshoe around the base of the rock on which stands the fort. It has an area of about two square miles, and is encircled by a strong massive wall, built in the first half of the eighteenth century, which is 24,600 feet long, three to nine feet thick, and fifteen to thirty feet high, and is strengthened in many places by towers, buttresses and ramparts for artillery, supporting a complete line of battlements and having loopholes and barbicans for defensive operations. Access is obtained by means of six gates, studded with sharp iron spikes to protect them against elephant ramming; five of the gates are called after the towns they face, namely Jālor, Merta, Nāgaur, Siwāna and Sojat, while the sixth is named Chānd Pol because it confronts the direction in which the new moon (*chānd*) is visible; a seventh gate once existed on the north side, but was blocked up many years ago, having always been considered a weakness in the defence of the place. The walls and towers near the Nāgauri gate show marks of cannon-balls left by the armies of Jaipur and Bīkaner which, with the aid of the great freebooter, Amīr Khān, marched on Jodhpur about 1806 to support the pretender Dhonkal Singh against Mahārājā Mān Singh; eventually Amīr Khān changed over to the side of the latter, and the insurgents were forced to retire with considerable loss and ignominy.

The fort, which is in its way the finest in Rājputāna, commands the city and, standing in great magnificence on an isolated rock about four hundred feet above the surrounding plain, attracts the eye from afar; its wall, varying from twenty to one hundred and twenty feet in height and from twelve to seventy feet in thickness, encloses an oblong space about five hundred yards in length by two hundred and fifty in breadth at the widest part. There are two main entrances, the Jai Pol at the north-eastern corner and the Fateh Pol in the south-west leading up from the city, and between them are several other gates and inner walls erected for purposes of defence. The Fateh Pol was built by Mahārājā Ajīt Singh shortly after Aurangzeb's death in 1707 and the Jai Pol by Mahārājā Mān Singh about a hundred years later; the door of the latter gate is said to have been brought from Ahmadābād by the Thākur of Nīmāj in or about 1731. The principal buildings in the fort are a series of apartments forming the palace, the most noteworthy being (*i*) the Motī mahal, built by Sawai Rājā Sūr Singh and added to by Mahārājā Takht Singh; (*ii*) the Fateh mahal built by Mahārājā Ajīt Singh to commemorate the expulsion of the Mughal garrison in 1708; and (*iii*) the room now used as an armoury. The buildings generally are decorated with beautifully carved panels and pierced screens of red sandstone, and some of the ceilings and walls possess fresco paintings of considerable artistic merit. The fort is supplied with water from the Rānī Sāgar,

a tank constructed by one of the wives of Rao Jodha; the water is lifted about four hundred feet by means of a steam force-pump (erected some fifteen years ago at a cost of nearly Rs. 16,000) and is delivered by pipes. Two wells also exist within the citadel; one, called Pātalia, is said to be 450 feet in depth, and the other (in the Chaukīlao mahal) is believed to be even deeper. The largest and most powerful guns are styled Kilkila and Shambhubhān, and were both brought from Ahmadābād in 1731 by Mahārājā Abhai Singh.

The city contains many handsome buildings, including ten old palaces, some town-residences of the Thākurs, and eleven fine temples, the most beautiful, architecturally, being the Kūnj Bihāri-kā-mandir, built by Gulāb Raijī, a concubine of Mahārājā Bijai Singh. The water-supply is stored in seven tanks, some of which can, when necessary, be fed by canals from the Kailāna reservoir on the west or from Bālsamand on the north; many of the streets are narrow and irregular, some being blind alleys, but the main thoroughfares have been much improved during recent years by being paved with stone and provided with side drains. The local industries are unimportant, consisting chiefly of lacquer work, dyeing of cotton cloths and the manufacture of brass and iron utensils; the *phūlmālas* or embroidered silk knotted threads, made by Oswāl Mahājans and worn round the turban, and the quilted dressing-gowns are, however, more or less peculiar to the place. The bullock tramway, which connects the city with the railway station, has already been noticed at page 122 *supra*, as have the municipal committee and the steam conservancy tramway—the latter the first of its kind in Rājputāna—in Chapter XV, and the Central jail and subsidiary prison, both of which are outside the city walls, in Chapter XVIII; while a list of educational and medical institutions will be found in Tables Nos. XXXI and XXXIII in Vol. III-B respectively.

It may here be noted that Jodhpur was the most literate city in Rājputāna at the last census, 223 persons in every thousand having been returned as able to read and write; it also held the premier position for the sexes separately, namely 421 per mille of the males and 27 per mille of the females. The institutions maintained by the Darbār consist of a first grade College; a high school with lower secondary and primary sections, a boarding-house for Rājput boys, and a special class in which telegraphy is taught; two primary schools (one anglo-vernacular); a Sanskrit school; and a girls' school. The above are located mostly in the suburbs, while the city proper possesses numerous schools, some of which receive grants-in-aid from the State and others are of the indigenous variety. Jodhpur is also well supplied with medical institutions, there being three large hospitals in the city (described at page 173 *supra*) as well as a smaller one and a dispensary, while in the suburbs are to be found the Imperial Service cavalry and jail hospitals and a couple of dispensaries, one of which is close to the Residency and is maintained by Government, and the other is for railway *employés*.

Half a mile to the north-east of the city is the village of Mahāmandir, surrounded by a fortified stone wall about a mile and a quarter in circumference and having four gates. Population (1901) 2,266. It possesses a magnificent temple (whence the village is called Mahāmandir or "the great temple") and two fine old palaces, one of which is consecrated as the supposed abode of Mahārājā Mān Singh's spirit, while the other is occupied by a Nāth who is a descendant of the same chief's spiritual guide. To the south of the city the principal buildings are the Jaswant Sarāi, the dāk-bungalow, the post office, the railway station and workshops, the Central jail, the flour-mill, the ice factory, the Residency and other houses occupied by officials; and to the east and north-east are the handsome public offices, the late Mahārājā's palace at Rai-kā-bāgh, the Imperial Service cavalry lines, and the fine new palace at Rātanāda.

Mandor.—A ruined town in the Jodhpur district, the Maddodara of inscriptions, situated in 26° 21′ N. and 73° 2′ E., about five miles north of Jodhpur city. The population in 1901 numbered 1,450, and consisted largely of Mālis or gardeners. The place, which is said to be named after Mandu Rishī, is of great historical interest from having been the capital of the Parihār Rājputs till 1381 (when it was wrested from them by Rao Chonda), and subsequently the seat of government of the Rāthors till 1459, when Jodhpur city was founded. The old fort (Jūnāgarh), built originally by a Buddhist architect, overlooks the Nāgādarī stream and is now in ruins; it contains a low and dark pillared chamber or cave, in which is found the sculptured effigy of Nāhar Rao, a famous (and, according to some, the last) Parihār chief of Mandor. On the top of the cave may be seen some individual's name engraved in two or three places in characters of the early Gupta period, while just outside on a raised platform a fragment of an inscription (of probably the tenth century), mentioning a son of Kakka of the Parihār dynasty, was recently discovered, but the stone has since been removed to the historic office at Jodhpur. The whole ground in the vicinity is covered with the remains of many ancient temples, the most noteworthy of which is a two-storeyed Jain structure, lying to the north and consisting of small cells running on the three sides of an oblong both above and below; the pillars of the porch in front of the shrine are perhaps as old as the tenth century. About half a mile to the south-east are two pillars, which are the only parts now surviving of what Tod calls "a gateway and magnificent *Torun* or triumphal arch"; they are the oldest objects of antiquarian interest now obtaining in Mandor and, according to Mr. Bhandarkar, * "cannot be posterior to Christ."

On an elevated plateau not far from the fort are the *pānch kūnda* or five sacred reservoirs—a place of pilgrimage for Hindus—and close by are the cenotaphs of four of the earlier Rāthor rulers; the carving on that of Rao Ganga, who died about 1532, is very fine, but unfortunately the spire of the building has long disappeared.

* *Progress Report of the Archæological Survey of India, Western Circle*, for the year ending 31st March 1907, page 33.

A little to the east is the *dargāh* of Tanna Pīr, built in the time of Mahārājā Mān Singh and held in high veneration; it is decorated with some handsome sandalwood carvings, and its courtyard contains several older tombstones bearing Arabic inscriptions and a *satī* tablet dated 1169 A. D. To the south of the reservoirs will be seen a large number of *chhatris* or monuments of the canopy type, which pertain to the Rānīs of Mārwār; the most prominent is that of the consort of Mahārājā Mān Singh—a lady of the Kachwāha clan of Rājputs—and it is handsomely carved, possesses thirty-two pillars, and bears an inscription giving 1826 A. D. as the year of her death.

At Mandor itself, near Motī Singh's garden, are the cenotaphs "attesting the epoch of Mārwār's glory, which commenced with Māldeo and ended with the sons of Ajit," and the humbler monuments erected over the ashes of the later chiefs. Of these buildings, that raised in memory of Ajīt Singh (who was murdered by his son in 1724) is larger and grander than anything in the neighbourhood; it is profusely inscribed, and marks the spot where his sixty-four wives and concubines immolated themselves on his funeral pyre. Another object of interest close by is the hall of heroes, known as the *Tetīs karor devatān-kā-sthān* or the abode of the 330 million gods of Hindu mythology; it is a gallery containing sixteen colossal figures hewn out of a single natural rock, and of these figures, seven are images of gods and nine of heroes. The latter are as follow:—(*i*) a Gosainjī or high priest; (*ii*) Mallināthjī, the eldest son of Rao Salkha, after whom the district of Mallāni is named— see page 199 *infra*; (*iii*) Pābujī, a Rāthor Rājput, who is said to have first brought the camel into general use and to have been a great protector of cows; (*iv*) Rāmdeojī, a Tonwar Rājput of the family of Anang Pāl of Delhi, who founded the village of Rāmdeora (about ten miles north of the town of Pokaran), where a fair is held yearly in his honour in August or September, and is sometimes called Rāmsāh Pīr and is worshipped by the lower classes; he is said to have never told a lie, and to have buried himself alive in 1458 A. D.; (*v*) Harbujī, a Ponwār Rājput of the Sānkla sept, who lived in the village of Bengti (close to Phalodi), where his cart is still an object of worship, and who is reported to have been a favourite of Rao Jodha; (*vi*) Jāmbhājī, a Ponwār Rājput of Harsar in Bīkaner, who has been mentioned at page 90 *supra* as the founder of the creed of the Bishnois and who is supposed to have given Dūda (the fourth son of Rao Jodha) the wooden sword with which he captured Merta—see page 55; (*vii*) Mehājī, a famous chieftain of the Gahlot (or Sesodia) clan of Rājputs, whose praises are still sung by the Chārans; (*viii*) Gogājī, a Chauhān Rājput who became a Musalmān and held sway from Hānsi to the Sutlej; he is said to have been killed in a battle with Fīroz Shāh II of Delhi at the end of the thirteenth century; and (*ix*) Jālandharnāthjī, an ascetic of renown belonging to the Nāth sect, one of whose descendants, Deonāth, was the founder of the great temple at Mahāmandir (near the capital) and for many years the spiritual director of Mahārājā Mān Singh. All the above figures are

uncouth, profusely besmeared with paint, and of no artistic or archæological value whatever, but they are interesting as showing how easily heroes and saints come to be ranked with and worshipped as gods by the Hindu masses.

An old palace, called the Ektambha mahal from its resemblance to a pillar, and a well-kept garden, watered from the Nāgādarī stream, are worthy of note, while about half a mile to the north-east is a place which is known to the people as Rāvan-kī-chaorī as being the spot where the marriage of Rāvana, the demon king of Ceylon, with Mandodarī, the daughter of the ruler of Mandor, was solemnised. Here will be seen the remains of a raised daīs, at the back of which is a group of nine figures, each about eighteen inches in height and cut out of an isolated solid rock. The figures, which represent Ganapatī and the Ashtmātri, are all standing, but their heads have been broken off; the peculiarity about the Ashtmātri is that, with the exception of the last—an image of Chāmūnda with eight hands—they alternately have two and four hands each. The pose and sculptured ornaments of these figures leave no doubt as to their early age. [J. Tod, *Annals and antiquities of Rājasthān*, Vol. I, pages 721—32 (1829); A. Cunningham, *Archæological Survey of Northern India*, Vol. XXIII; and *Progress Report of the Archæological Survey of India, Western Circle*, for the year ending 31st March 1907.]

Mallāni.—The largest district of the Jodhpur State, situated in the west with an area of 5,750 square miles. In 1901 it contained one town (Bārmer) and 464 villages, all held by a number of petty *jāgīrdārs* with the exception of one single village (Netrān) which is *khālsa*. The population decreased from 221,184 in *1891* to 172,330 in *1901*, or by more than twenty-two per cent., and this was due to the famine of 1899-1900. At the last census about seventy-five per cent. of the inhabitants were Hindus, twelve per cent. Musalmāns, six per cent. Animists, and five per cent. Jains; the most numerous castes were Jāts (39,909); Bhīls (11,732); Rājputs (11,394, including 1,404 Musalmāns); Mahājans (11,035); Brāhmans (9,409); Balais (8,033); Chākars (6,064); and Sheikhs (5,038). The salient features of the country are the sand-hills, which in some places rise to an altitude of three or four hundred feet; the northern and western portions form part of the desert stretching into Sind and Jaisalmer. Water is usually brackish and in some spots deadly to man or beast; wells and pools yield potable water only after the rains and become noxious by March, so that in the summer there is a great scarcity of water and the use of a wholesome well has to be paid for. The sandy wastes provide excellent grazing for the herds of camels, cattle, sheep and goats kept by a large migratory population, including some of the hardy Baloch tribes. The only river is the Lūni, which enters the district at Jasol and pursues a tortuous course of about eighty miles till it passes into Sānchor and thence to the Rann of Cutch. There are about forty *jhīls* or marshes in the vicinity of Bārmer, Takhtābād and Setrao, some of which cover an area of four or five hundred acres; in favourable seasons, wheat is grown in their

beds, and when they are dry they yield a good supply of water at a depth varying from eight to twenty-four feet. Fullers' earth is found in considerable quantities, and gypsum to a small extent; the principal manufactures are cloths of a mixture of cotton and wool, woollen blankets, small rugs of camel hair, millstones, and horse and camel saddlery. The horses of Mallāni are famed for their hardiness and ease of pace, and, though light-boned, will carry heavy weights; the best are bred in the villages of Nagar and Gūrha.

The soils may be divided into three classes, namely (*i*) sandy, known as *thal* and occupying three-fourths of the entire area; (*ii*) a hard sandy clay (*nayar*), but generally so salt and sterile as to nurture only grass which springs up with the rains and withers away almost at once; and (*iii*) patches of deposited soil (called *par*) lying at the foot of the limestone ridges. The last is in great request as crops can, at little expense, be grown on it twice a year, water for irrigation purposes being obtainable by digging shallow reservoirs in the surrounding limestone bed, but unfortunately there is very little of this soil. The chief crops are *bājra*, *mūng*, *moth*, *til* and cotton; wheat is sown on the banks of the Lūni and sometimes in the beds of certain marshes, but is rare elsewhere; barley and gram are practically unknown, but watermelons grow in wild profusion in the rains, and a gourd called *tumbī* is indigenous all over the district, particularly in the sandy portions. Agricultural statistics exist only for the *khālsa* area (44 square miles), of which about forty square miles are available for cultivation; the area ordinarily cropped is twenty-two square miles, *bājra* occupying about fifty-two, cotton twenty-two, the minor millets and pulses sixteen, and *til* nine per cent. The yearly land revenue paid by this *khālsa* village is approximately Rs. 4,000. The administration of the district is in the hands of a Superintendent, under whom are the *Hākim* or chief local officer, the Munsif who settles civil suits and disputes about land, and the *Risāldār* who is the head of the local police. There are four vernacular schools of long standing (at Bārmer, Chhotan, Gūdha and Jasol), besides several Mārwārī *posāls* and a couple of small hospitals (at Bārmer and Jasol).

Historically, the tract is very interesting, and justly claims to be the cradle of the Rāthor race in the west. Here, in the beginning of the thirteenth century, Rao Siāhjī and his son Asthānjī, having conquered Kher (now a ruined village near Jasol) and the adjoining tract called Mewo from the Gohel Rājputs, planted the standard of the Rāthors amid the sand-hills of the Lūni. The eighth in succession from Siāhjī was Rao Salkha, in whose time—about the middle of the fourteenth century—a separation took place. Salkha had three sons, namely Mallināth, Vīramdeo and Jet Mal. A portion of the tribe followed the fortunes of Vīramdeo, whose son Chonda captured Mandor from the Paribār Rājputs in 1381 and whose descendants ruled first there and subsequently at Jodhpur; the rest remained on the banks of the Lūni with Salkha's eldest son Mallināth, after whom the district of Mallāni is named.

Succession being by the law of gavelkind, the country became minutely subdivided among the descendants of Mallināth, and the dissensions and blood-feuds thereby created offered the chiefs of Jodhpur opportunities to interfere and establish an overlordship which continues to the present day. The district was for centuries one continual scene of anarchy and confusion, and the inhabitants were described as "more savage and lawless than the neighbouring Khosās of the desert"; the Darbār, when called upon to repress their excesses, acknowledged its inability to do so, and under these circumstances it became necessary for the British Government to occupy Mallāni in 1836 and restore order by reducing the principal Thākurs. The territory was subsequently held in trust by Government, the rights of the Jodhpur chief being recognised, and, as the Darbār gave increasing evidence of sound administration, its jurisdiction has been gradually restored, namely military in 1854, civil in 1891, and criminal in 1898.

As already observed, the whole of Mallāni except one village consists of *jāgīr* estates, the principal being Jasol, Bārmer and Sindari held by descendants of Mallināth, and Nagar and Gūrha held by descendants of Jet Mal; the minor estates are Chhotan, Setrao, Bisāla and Siāni. All the *jāgīrdārs* pay a small yearly tribute (called *faujbal*) to the Jodhpur Darbār, which thus derives an income of about Rs. 18,000 including a few miscellaneous items. Among places of archæological interest may be mentioned Kher (noticed in the article on Jasol below), Kerādu and Chhotan. The old name of Kerādu was Kerātakūpa, and the ruins of this ancient town extend for a little over a mile along the foot of a hill which is about eighteen miles north by north-west of Bārmer. The remains of many temples and mansions can be traced, but all of them except five fanes are utter wrecks. The first is the largest, faces the west, and consists of a shrine, antechamber, hall and porch, but the entire roof, save that of the shrine, has completely gone. The temple appears to have been built in the earlier part of the Solanki period, and the inside walls of the porch possess three more or less mutilated inscriptions; one is dated 1153 A.D., refers itself to the reign of Kumārapāla of Gujarāt, and has been published in the *Bhaunagar Inscriptions*; another of 1161 A.D. gives an account of an entirely new Paramāra dynasty; while the third bears the date 1179 (of the same era), and records the installation of a new image by the wife of one, Tejapāla, a subordinate officer of a Chauhān Rājput called Madanabrahmā, who was himself a feudatory of the great Bhīmadeva II of Gujarāt. In the vicinity are three temples dedicated to Siva; they all face the west, and are of the same design. The fifth is a Vaishnava shrine and certainly the oldest temple here, but it is in a dilapidated condition. Two of the outside niches, facing the south and west, contain rather curious images of Vishnu; the first shows him seated on a *sinhāsan* with ten hands and a nimbus behind his head, while in the second he is riding the *garud* or eagle and has three faces, one of which has a tusk and consequently represents Varāha. The village of Chhotan

lies at the foot of a hill about twenty-eight miles south-west of Bārmer, and half way up this hill are the remains of three Sivaite temples. The first, which has evidently been rebuilt, consists of a shrine, a hall and two porches; there are three or four inscriptions on the pillars of the hall, but they are all modern except one which is dated 13 . . —the last two figures have disappeared—and refers to the reign of one Srī Kānhadeva. Close by and to the north is a small but interesting shrine dedicated to Lakulīsa, whose head, canopied by a seven-hooded cobra, appears on the door; the pillars and spire belong at the latest to the eleventh century, and an inscription dated 1308 A.D. tells of repairs carried out by Srī Dharmarāsi, the pupil of Srī Uttamarāsi. The third temple is of about the same age as the last, and differs from the first in that it has three, instead of two porches; the spire and the roofs of the hall and porches have all disappeared. On the dedicatory block of the shrine door is a curious piece of sculpture, which perhaps represents an ornamental *lingam*, flanked by a male on one side and a female on the other, each of whom is in the act of decking it with a garland. Above are Siva in the middle, with Brahmā to the right and Vishnu to the left. [For a fuller account of the temples at Kerādu and Chhotan, see the *Progress Report of the Archæological Survey of India, Western Circle*, for the year ending 31st March 1907, pages 40—43.]

Bārmer.—One of the principal estates in Mallāni, consisting of sixty-six villages held by five different families, all descended from Mallināth and known respectively as Raotāni (the first in rank), Sāhibāni, Kishnāni, Pophāni and Khimāni. The Rājputs of Bārmer, living, as they do, a great deal in the open air and being moderate in the use of both wine and opium, are of particularly fine physique. Fullers' earth is found at Kāpuri and other places in the estate, and is used locally as a hair wash; horses and cattle are bred in considerable numbers, and find a ready market at the fair held annually at Tilwāra (near Bālotra) in March.

The Thākurs of Bārmer reside at the town of the same name which is also the headquarters of the Mallāni district. It is situated in 25° 45′ N. and 71° 23′ E. on the Jodhpur-Bīkaner Railway, 130 miles south-west of Jodhpur city. Population (1901) 6,064. The town is said to have been founded in the thirteenth century by a Rājā Bāhada, and to have been called after him Bāhada-mer (the *mer* or *meru*, that is to say, the hill-fort of Bāhada), since contracted to Bārmer. It is substantially built on the side of a rocky hill, on the summit of which are the remains of an old fort, and it possesses a post and telegraph office, a vernacular school, two Mārwārī *posāls*, a hospital with accommodation for four in-patients, and an ancient temple dedicated to Bālarikh (another name for the sun), the idol in which is of wood. The stone of the hill is largely used for building and roofing purposes, and the principal manufactures are millstones and camel-trappings. About four miles to the north-west are the ruins of Jūna or Jūna Bārmer, an old town which

appears to have had a very large fort on an adjacent hill, but portions only of the ramparts are now visible. The remains of three Jain temples will be found at a distance of some two miles to the south, and one of the pillars of the hall of the largest bears an inscription dated 1295 A.D. which mentions a *Mahārājakula Srī Sāmanta Sinhadeva* as ruling at *Bāhadameru*.

Jasol.—One of the principal estates in Mallāni consisting of seventy-two villages, held by two families claiming descent from Mallināth; the representative of one has the title of Rāwal, and of the other that of Thākur, and between them they pay a yearly tribute of Rs. 2,100 to the Jodhpur Darbār. The principal place in the estate is the village of the same name situated in 25° 49′ N. and 72° 13′ E., on the left bank of the Lūni river, nearly two miles from Bālotra station on the Jodhpur-Bikaner Railway. It is built partly on the slope of a hill, and possesses a post office, a couple of schools, a hospital with accommodation for two in-patients, and a bungalow for the use of officials. In 1901 the village of Jasol contained 2,543 inhabitants. About five miles to the north-west are the ruins of Kher, the old capital of Mallāni, and one of the first conquests of the Rāthors in Rājputāna, while to the south-west are the remains of another important town, Nagar. As these places decayed, Jasol rose and now contains the descendants of some of the earliest Rāthor settlers.

Mārot Hukūmat.—A district in the extreme north-east of the Jodhpur State, having an area of 498 square miles, of which about one-twelfth is *khālsa* or under the direct management of the Darbār. In 1901* it consisted of 109 villages containing 54,873 inhabitants, more than ninety-two per cent. of whom were Hindus, and the principal castes were Jāts (12,484); Balais (6,730); Rājputs (6,188, including forty-five Musalmāns); Brāhmans (4,602); Mahājans (4,183); and Gūjars (3,778). Wells are numerous, and both spring and autumn crops are grown; the land revenue realised by the Darbār averages Rs. 7,500 yearly. Agricultural statistics are available for only thirty-two square miles, of which about one-half is usually cultivated, *bājra* occupying fifty-three, the smaller millets and pulses thirty-five, and barley, wheat and *til* (chiefly the first) together nearly five per cent.

The headquarters of the district are at the village of the same name, situated at the south-eastern extremity of a small range of hills in 27° 6′ N. and 75° 6′ E., about eight miles north-east of Kuchāwan Road station, a junction of the Jodhpur-Bikaner and Rājputāna-Mālwā Railways. Population (1901) 3,899. The village possesses a post office and two schools.

Merta Hukūmat.—A district in the north-east of the Jodhpur State, having an area of 1,618 square miles of which nearly one-fourth is *khālsa*; in 1901 it contained one town (Merta) and 370 villages with a total population of 142,854, chiefly Jāts (22,990); Brāhmans

*The town of Kuchāwan and certain villages formerly included in the Sāmbhar *hukūmat* have recently been transferred to this district—see page 214 *infra*.

(17,761); Rājputs (13,716 including 555 Musalmāns); Balais (10,070); Mahājans (7,620); Baoris (4,874); Mālis (4,795); and Kumhārs (4,789). In about half of the district, wells containing sweet water are rather numerous, and much of the soil is a mixture of sand and clay; the tract may consequently be described as fairly fertile, and it yields to the Darbār a yearly land revenue of some Rs. 1,33,500. Agricultural statistics exist for an area of about 343 square miles, of which rather more than one-third is usually cultivated, the irrigated portion averaging twenty-six square miles; of the cropped area, *bājra* ordinarily occupies about twenty-six, *jowār* twenty-two, inferior millets and pulses nearly twenty, wheat and oilseeds each ten, gram four or five, and barley between three and four per cent. There are generally two or three square miles under cotton and maize, and a few acres under tobacco and sugar-cane. The Lūni river flows for a few miles through the south-eastern corner, and the Jodhpur-Bīkaner Railway traverses the centre of the district. The chief manufactures are cotton cloths, woollen blankets and mats, and earthen toys and vessels. The most important *jāgīr* estates in Merta are Alniawās and Rian, described below.

Alniawās.—An estate in the Merta district, consisting of four villages held by a Thākur who is one of the first class nobles of Mārwār and a Rāthor of the Mertia sept. The annual revenue is about Rs. 11,000, and a tribute of Rs. 1,088 is paid yearly to the Darbār. The estate was first conferred in 1708 by Mahārājā Ajīt Singh on Kalyān Singh, whose successors have been:—Rām Singh, who took part in the battle fought at Merta about 1755; Lakhdīr Singh, who assisted Sūraj Mal, the Jāt chief of Bharatpur, when he was attacked by the Jaipur forces at Maonda (in the Torāwati district of Jaipur) some eleven years later; Fakīr Dās, who fought against Sindhia at Tonga in 1787; Bharat Singh, who aided in defending the fort of Jodhpur in 1806 when it was besieged by the armies of Jaipur and Bīkaner; Hanwant Singh; Ajīt Singh; Udai Singh; Sheonāth Singh; and Sheo Singh. The last named is the present Thākur; he was born in 1879, succeeded by adoption in 1888, and was educated at the Mayo College. The chief place in the estate is the village of the same name, situated on the left bank of the Lūni in 26° 31′ N. and 74° 20′ E., about twenty miles south-east of Merta town. Population (1901) 2,224.

Merta Town.—The headquarters of the district of the same name, situated in 26° 39′ N. and 74° 2′ E., seventy-three miles by rail north-east of Jodhpur city; the nearest station was formerly Merta Road (on the Jodhpur-Bīkaner Railway) nine miles to the north-west, but since 1905 the place has been connected with Merta Road by a branch line. Population (1901) 4,361. The town was founded by Dūda, the fourth son of Rao Jodha, about 1488 and was added to by Rao Māldeo, who built the wall (now somewhat dilapidated) and the fort (called after him Mālkot). In 1562 Akbar took the place after an obstinate and sanguinary defence, but, about twenty years later, he restored it to the Jodhpur chief, Rājā Udai Singh.

Merta was at one time a great trade centre, and there are still many finely carved stone houses which were formerly occupied by merchants whose descendants have settled in Ajmer; it possesses a post office, an anglo-vernacular school, a hospital with accommodation for six in-patients, a lofty mosque (said to have been built by Akbar), a handsome step-well paved with marble, several large and finely carved temples, and a well-kept garden. The principal manufactures are *khaskhas* fans and screens, ivory work, woollen cloaks and mats, country soap, and earthenware toys.

The country around has been the scene of many a hard-fought battle and is covered with stone pillars erected to the memory of the dead. It was at Dangawās, two miles to the east, that the Marāthās under de Boigne inflicted a severe defeat on the Rāthors in 1790; and on the embankment of a tank called Dangolai is the tomb of a French captain of infantry, who was wounded in Sindhia's service on the 11th September 1790 and died a week later, aged sixty-one. At the village of Phalodi to the north-east is a handsome and lofty Jain temple to Pārasnāth, and a fair is held here yearly, while the rising little town of Merta Road has a post office, a cotton-press, an anglo-vernacular school, and a dispensary for the benefit of the railway *employés* and their families.

Rian.—An estate in the Merta district, consisting of eight villages held by a Thākur who is one of the first class nobles of Jodhpur and the head of the Mertia sept of the Rāthor Rājputs, *i.e.* of the family claiming descent from Dūda, the fourth son of Rao Jodha. The yearly income is about Rs. 36,000, and a tribute of Rs. 2,888 is paid to the Darbār. The estate is one of the oldest in Mārwār, having been first granted by Rājā Gaj Singh in 1637 to Gopāl Dās, since whose time there have been the following thirteen Thākurs, namely Pratāp Singh; Achal Singh; Kushāl Singh; Sardār Singh; Sūraj Mal; and Sher Singh, whom Tod styles Mahārānā and of whom he gives a portrait. Sher Singh was one of the bravest of the brave; he took part in the battle of Merta (1752) fighting on the side of Mahārājā Rām Singh against the latter's uncle, Bakht Singh, and "was the first who sealed his devotion by his death." Bakht Singh, on succeeding to the *gaddi*, resumed the estate for a short time, and then conferred it on Jawān Singh, who belonged to a junior branch of the family. Jawān Singh fought in the second battle of Merta (1756) and was wounded; his successors were:—Bakhtāwar Singh, who was wounded at the battle of Tonga (1787); Birdhī Singh, who took part in the third batte of Merta (1790) and assisted in defending Jodhpur in 1805-06, when the fort was besieged by the armies of Jaipur and Bīkaner, aided by Amīr Khān; Sheonāth Singh; Devī Singh; Gambhīr Singh; and Bijai Singh. The last named (the present Thākur) was born in 1872, succeeded his father in 1878, was educated at the Mayo College, and is a member of the State Council.

The chief place in the estate is the small town of the same name, situated close to the right bank of the Lūni in 26° 32′ N.

and 74° 14′ E., about sixty-eight miles north-east of Jodhpur city and sixteen south-east of Merta station on the Jodhpur-Bīkaner Railway. The town is walled and lies at the western base of a rocky hill, on which stands a fort about 200 feet above the plain; the water-supply is obtained from numerous wells and a fine *bāolī* or reservoir which is about forty feet deep and pleasantly shaded by large trees. The place possesses a post office, and in 1901 contained 4,574 inhabitants.

Nāgaur Hukūmat.—A district in the north and north-east of the Jodhpur State, with an area of 2,608 square miles, of which rather more than one-fourth is *khālsa*. In 1901 it consisted of four towns (Kuchera, Lādnun, Mūndwa and Nāgaur) and 420 villages, but one of the towns (Lādnun) and several of the villages have since been transferred to the Dīdwāna district. At the last census the population numbered 167,759, Hindus forming more than eighty-five and Musalmāns eight per cent. of the total; the most numerous castes were Jāts (42,949); Brāhmans (16,117); Rājputs (11,146 including 978 Musalmāns); Mahājans (10,825); Balais (9,938); Mālis (7,800); Rebāris (6,393); Kumhārs (4,951); and Chākars (4,513 including nine Muhammadans). The soil is sandy, and wells, besides being rather scarce and deep, generally contain brackish water; consequently, the more valuable crops are not cultivated to any large extent. The land revenue paid to the Darbār averages Rs. 1,45,000 a year. The area for which agricultural statistics exist is about 590 square miles, of which rather more than one-third is ordinarily cultivated, only two square miles being irrigated; of the cropped area *bājra* usually occupies forty-five, *jowār* twenty-five, the minor millets and pulses twenty, and *til* eight per cent. The district, however, possesses excellent grazing-grounds, and its milch cows and bullocks—particularly the latter—are very famous. Gypsum or *khādi* is found in considerable abundance throughout the tract and is used for cement, while yellow sandstone is quarried at Khātu and other places.

The history of the district is identical with that of its chief town Nāgaur, described below. In Akbar's time it was a *sarkār* or division in the *Sūbah* or province of Ajmer, and comprised thirty *parganas* including Dīdwāna, Lādnun, Merta, etc., which yielded an annual revenue of more than forty million *dāms* or about ten lakhs of rupees. Two villages—Kataoti and Manglod—are of archæological interest. At the former are a mosque, said to have been built by Akbar, and the *dargāh* of Shāman Shāh Pīr, some Muhammadan saint; while Manglod has a very old temple to Dadhmat Mātā with a Sanskrit inscription* dated 604 A.D., which records its repairs during the reign of a king Dhuhlāna. Both villages lie to the east of Nāgaur town, and the inscription above referred to is the oldest yet discovered in Mārwār.

The principal *jāgīr* estate in the district is Khinwasar, consisting of seventeen villages yielding an annual revenue of about Rs. 12,000,

*See the *Progress Report of the Archæological Survey of India, Western Circle*, for the year ending 31st March 1907, page 31.

and held by one of the first class nobles who belongs to the Karmsot sept of the Rāthors (descended from Karm Singh, a son of Rao Jodha) and pays a tribute of Rs. 956 a year to the Darbār. The estate is apparently one of the oldest of the first class as it was granted by Rao Māldeo in 1561 to Mahesh Dās ; the name of the present Thākur is Ranjīt Singh, and he resides at the village of Khinwasar which is situated in 26° 59′ N. and 73° 25′ E., about sixty miles north-east of Jodhpur city and twenty-eight west by south-west of Mūndwa station on the Jodhpur-Bīkaner Railway. Population (1901) 2,175. There is a post office here.

Mūndwa.—A town in the Nāgaur district, situated in 27° 4′ N. and 73° 49′ E. on the Jodhpur-Bikaner Railway, eighty-nine miles north-east of Jodhpur city. Population (1901) 5,121. The place is a commercial mart of some importance, and is noted for its wooden toys and other fancy articles ; it is the home of several prosperous Mārwārī traders having business connections in various parts of India, and possesses some handsome houses, a post office, an anglo-vernacular school, three or four Mārwāri *posāls*, and a garden which is irrigated from a large tank. A fair, instituted by Mahārājā Bakht Singh in honour of Srī Krishna under the name of Girdhāri, is held in December and January and is attended by people from Bhiwāni (in Hissār) as well as from Mārwār ; bullocks are sold in large numbers.

Nāgaur Town.—The headquarters of the district of the same name, situated in 27° 12′ N. and 73° 44′ E. on the Jodhpur-Bīkaner Railway nearly one hundred miles north-east of Jodhpur city ; it is very picturesque from all aspects, especially from the high ground two miles to the south-east. Population (1901) 13,377. The town is surrounded by a wall which is more than four miles in length, between two and a half and five feet thick, and on the average seventeen feet high ; access is obtained by means of six gates, three on the southern side, and one each on the north, west and east. The battlements bear many Arabic and Persian inscriptions obtained from mosques demolished by Mahārājā Bakht Singh in order to repair breaches caused in warfare. The place possesses a post office, an anglo-vernacular school, several private schools, a hospital with accommodation for six in-patients, and a dāk-bungalow or resthouse ; the streets and alleys are for the most part irregularly built, but contain many handsomely carved sandstone houses, the property of Seths or bankers. Only thirty years ago, some of the latter used to receive intimation of opium sales in Calcutta by telegrams to Ajmer, whence the news was flashed by means of mirrors stationed at different points to Nāgaur eighty-seven miles and from it to Bīkaner ; the monthly subscription for these messages was Rs. 50, and a banker told the Political Agent in 1876 that on the previous day he had received intelligence from Calcutta in one hour. The principal manufactures are brass and iron utensils, guitar strings, padlocks, ivory toys, camel saddles, lacquer-ware and dyed cloths. The water-supply is good and fairly abundant, and the climate generally salubrious, though extremes of temperature

are very great, the heat being intense in the summer and frost common in the winter.

Of numerous religious edifices, two Hindu temples and a mosque are specially noteworthy. The temple of Murlidar is remarkable as being virtually a double one, having two separate shrines; the *lingam* of Mahādeo and the statue of Krishna are side by side, encompassed by the same enclosure and spanned by the same pillars. The other temple is dedicated to Mātā and is nicely sculptured; it has two inscriptions dated respectively 1561 and 1602 A. D., but the building itself is much older. The mosque, which is said to have been constructed by Shams Khān (who was governor here) in the beginning of the fifteenth century, has the unusual number of five domes, but is in a very dilapidated condition. Another mosque, called the Atarkīn-kā-dargāh and situated outside the town, is deserving of notice as its gateway of light yellow stone is superbly carved, and a large ostrich's or bustard's egg hangs by a chain from the apex of the arch.

In the centre of, and rising above the town is an extensive fort with a double wall nearly a mile in circumference—the outer being twenty-five, and the inner fifty feet above the ground—and varying in thickness from more than thirty feet at the base to twelve at the top; it has six portals and two posterns. The principal objects of interest here are some palaces, a fountain with seventeen jets (dating from Akbar's reign,) a mosque erected by Shāh Jahān, and a cave claimed by both Hindus and Musalmāns as a place of retreat for their former saints.

Nāgaur is said to take its name from its traditional founders, the Nāga Rājputs, and was originally called Nāgapura or Nāga Durgā. It was held first by Prithwī Rāj Chauhān and next by the Muhammadan kings of Delhi till about the end of the fourteenth century when Rao Chonda seized it, but his son lost it and in 1416 Khizr Khān, one of the Saiyid kings, was in possession (with Shams Khān Dindāni as local governor) and routed Ahmad Shāh of Gujarāt who had come to besiege it. Subsequently, the place changed hands repeatedly. Rao Māldeo certainly recovered it, but had to surrender it to Akbar, who granted it for a short time to the chief of Bīkaner and eventually restored it to Rājā Udai Singh. Again, Shāh Jahān and Aurangzeb undoubtedly held it for varying periods, and it would seem that it was permanently acquired by the Jodhpur family at the beginning of the eighteenth century. [A. Cunningham, *Archæological Survey of Northern India*, Vol. XXIII).]

Pachbhadra Hukūmat.—A district situated more or less in the centre of the Jodhpur State, with an area of 854 square miles, of which about one-eleventh is *khālsa*. In 1901 it consisted of two towns (Bālotra and Pachbhadra) and 105 villages, and contained 39,427 inhabitants; the most numerous castes were Brāhmans (6,614); Mahājans (4,924); Balais (3,925); Rājputs (3,713 including two Musalmāns); and Jāts (2,933). The soil is sandy and the water generally saturated with salt; the river Lūni and the Jodhpur-

Bīkaner Railway traverse the extreme southern portion of the district. Statistics relating to agriculture are available for only sixty square miles, of which about one-sixth is usually cultivated; of the latter, *bājra* occupies fifty, *jowār* fifteen, wheat twelve and the minor millets and pulses eleven per cent., and there are generally a few acres under barley, cotton and *til*. The yearly land revenue realised by the Darbār averages Rs. 13,200. The principal *jāgīr* estate, Kanāna, consists of three villages held by a Thākur who is a Rāthor Rājput of the Karnot family and is entitled to the first class *tāzīm* from the Mahārājā of Jodhpur. The annual revenue is about Rs. 12,000, out of which Rs. 960 are paid yearly as tribute to the Darbār. The estate was originally granted by Mahārājā Abhai Singh in 1724 to Abhai Karan, and is at present held by Jas Karan.

Bālotra.—A town in the Pachbhadra district, situated on the right bank of the Lūni river in 25° 50′ N. and 72° 15′ E.; it is a station on the Jodhpur-Bīkaner line, seventy miles from Jodhpur city. Population (1901) 5,118. The town is built on a sand-hill and possesses a combined post and telegraph office, an anglo-vernacular school, a Mārwārī *posāl*, and a bungalow for officials on tour. The chief manufactures are dyed and stamped cloths. Just across the river, but in another district, is the village of Jasol, where there is a small hospital; while at Tilwāra, ten miles to the west, the famous horse and cattle fair is held yearly in March.

Pachbhadra Town.—The headquarters of the district of the same name, situated in 25° 55′ N. and 72° 15′ E., about five miles east of the Pachbhadra station on the Jodhpur-Bīkaner Railway and eighty miles by rail from Jodhpur city. Population (1901) 3,194. The town has a post office, a vernacular school maintained by the Darbār, and three private schools, in one of which English is taught. The water-supply fails nearly every summer, and has to be imported by railway. The place is also one of the hotest in India, the thermometer sometimes rising to 122° in the shade. Five miles to the west is the well-known salt source which was leased by the Jodhpur Darbār to the Government of India in 1878 for an annual sum of 1·7 lakhs, and here are to be found a meteorological observatory and a hospital with beds for nine in-patients—both institutions being maintained by Government, and the hospital affording medical aid to the people of the town as well as to those engaged in the salt industry.

The salt-lake has an area of about ten square miles and, unlike that at Sāmbhar, is not dependent on the rainfall as the brine springs are perennial. According to local tradition, the valley was in former times a marsh in which salt was deposited during the dry and hot months, and the wild aboriginal tribes collected the commodity for their own consumption and for sale to the inhabitants of the adjoining desert. Some four hundred years ago, a Jāt called Pancha occupied a small hamlet, which was called after him Pancha-padra (subsequently corrupted to Pachbhadra), when a man of the Kharwāl caste, named Jhānja, visited the place, and, noticing the formation

of the salt in the bed of the marsh and recognising the value of his discovery, settled here and commenced systematic work. He was soon joined by some of his kinsmen, and they at first proceeded on the old lines of collecting such salt as formed spontaneously, but eventually discovered that brine springs existed not far from the surface and accordingly dug a shallow pit so as to reach their level. A better kind of salt being thus obtained, they abandoned the old methods, and, later on, ascertained that the best crystals formed on the thorny branches of desert shrubs which were blown by accident into the pits. Experiments were made, and it was found that the shrub known as *morāli* (*Lycium europæum*) was most suitable, because its twigs did not decay in the brine and its long thorns facilitated the formation of large crystals.

These alleged discoveries of Jhānja and his brethren form the basis of the methods of manufacture followed at the present time; indeed, no improvement has been found practicable. Pits of an average length of 230 feet, with their banks sloped to an angle of about 45° are dug in the bed of the source to a depth of eleven feet until the subterranean springs of brine have been tapped, and these become filled to a depth of about three feet with strong brine, varying in density from 20° Beaumé to saturation point. Crystallisation is promoted by throwing branches of *morāli* (above mentioned) into the pits as soon as the formation of an overset of salt indicates that precipitation has commenced. During the great heat of April, May and June, the evaporation of the brine is very rapid, and as this proceeds and salt is precipitated, more brine flows in until the pit is filled with salt to a depth of about three feet, which takes place in two years. The salt is then ready for removal and, having been cut out in sections, the crystals are shaken off the thorny branches and stored in oblong heaps on the bank. The out-turn from a pit averages 370 tons every second year, and crop after crop is thus obtained. The salt is one of the best of Upper India, and is by many preferred to the Sāmbhar variety; it is white, clean and of good crystal, and contains from ninety-seven to ninety-eight per cent. of chloride of soldium.

As at Sāmbhar, so also here, the source is under the protection of the goddess Sakambari, who is said to have appeared before Jhānja and ordered him to dig out the images of herself and her sister from the centre of the lake and build a temple in their honour. This command he faithfully obeyed, but the shrine, as it now stands, has been considerably enlarged since his time; the image of Sakambari has an inscription dated 1514 A.D.

Since the lease to the Government of India in 1878, about 652,000 tons of salt have been produced, and the annual average out-turn during the last ten years has been about 28,130 tons, of which between forty-five and forty-six per cent. are exported to the United Provinces, twenty-seven per cent are consumed in Rājputāna, and the rest finds its way to Central India and the Central Provinces. In former times the whole of the carrying trade was in the hands of the

Banjāras, but, with the extension of the Jodhpur-Bīkaner Railway to Bālotra and the construction of the branch line to the works, very few of these wanderers visit the place, and practically all the salt is removed by rail. [F. Ashton, *The Salt Industry of Rājputāna* in *The Journal of Indian Art and Industry*, Vol. IX, January 1901.]

Pāli Hukūmat.—A district situated in the east and south-east of the Jodhpur State, with an area of 1,024 square miles, of which rather more than one-fifth is *khālsa*. In 1901 it consisted of one town (Pāli) and eighty villages, containing 43,889 inhabitants; the most numerous castes were Mahājans (6,175); Brāhmans (4,854); Rājputs (2,830); Balais (2,217); and Mālis (2,010). Wells are numerous, much of the soil is a sandy loam, and both spring and autumn crops are grown. Agricultural statistics are available for an area of 190 square miles, of which 34 square miles are usually cultivated (nine square miles being irrigated); of the total cropped area, *bājra* and *jowār* together occupy fifty-three per cent. (in almost equal proportions), wheat about twenty, oil-seeds twelve, barley five and gram three per cent. The Jodhpur-Bīkaner Railway enters the district in the east and leaves it in the north-west, and the old Agra-Ahmadābād road runs through the south-eastern corner. The *khālsa* land revenue averages Rs. 49,800 a year, and the only *jāgīr* estate of importance—Kharwā—is noticed below.

Kharwā.—A estate in the Pāli district, consisting of eleven villages held by one of the principal nobles of Mārwār who is a Rāthor Rājput of the Jodha sept. The annual income is about Rs. 30,000, and a tribute of Rs. 2,270 is paid yearly to the Darbār. The estate is said to have been first granted by Mahārājā Jaswant Singh in 1657 to Ranchhor Dās, who was killed fighting at Delhi in 1679 or 1680. His successors have been Bhīm Singh; Pratāp Singh, wounded at Ahmadābād in 1731; Indra Singh; Sawai Singh, wounded at Merta in 1790; Mān Singh; Daulat Singh; Sāmant Singh; Lachhman Singh, who received the title of Rao Bahādur for services during the Mutiny and was a member of the State Council; and Fateh Singh. The last named (the present Thākur) was born in 1887 and succeeded in the following year. The principal place in the estate is the village of the same name, situated in 25° 40′ N. and 73° 30′ E., about six miles west of Awā station on the Rājputāna-Mālwā Railway and fifty-six south-east of Jodhpur city. Population (1901) 3,373.

Pāli Town (sometimes called *Mārwār Pāli*).—The headquarters of the district of the same name, situated in 25° 47′ N. and 73° 19′ E., on the right bank of the Bāndi river and on the Jodhpur-Bīkaner Railway, forty-five miles south by south-east of Jodhpur city. Population (1901) 12,673. The town possesses a post office, an anglo-vernacular school maintained by the Darbār, five or six private schools, a hospital with accommodation for eleven in-patients, a couple of cotton-presses, and a dāk-bungalow; a tannery formerly existed here, but it was closed in 1904. The principal industries are copper working, ivory carving, cotton printing, and the dyeing of woollen, silk and cotton cloths; the water of the Bāndi is supposed to have some peculiar chemical

qualities which give a certain degree of permanency to the colours used by the dyers. A small establishment is kept up to look after the sanitary arrangements of the place, and the Darbār contributes Rs. 50 monthly towards the cost of the operations.

Pāli was held by a community of Brāhmans in grant from the Paramāra and Parihār Rājputs till the advent of the Rāthors from Kanauj (about 1212), when Rao Siāhjī became its master. The Pāliwāl Brāhmans take their name from the town which, before the construction of the railway, was a very important trade centre; in 1836 it was visited by an outbreak of plague, the germs of which are supposed to have been imported in silks from China. It now comprises an ancient and a modern quarter, each containing several temples. One of the oldest is that dedicated to Somnāth, who is here represented by his symbol—the *lingam*—and is attended by two small sculptured stone images of Nandi, the sacred bull on which he rode; it is a very handsome building, remarkable on account of its exquisite mouldings, and is attributed to Kumārapāla of Gujarāt, whose name and date (1143 A.D.) are legible in an inscription which it bears. The vast Jain temple called Naulākha is noteworthy, not only for its size, elaborate carving and strength as a defensive fort—it being surrounded by a set of outworks only accessible from within, save for one solitary entrance which is not quite three feet wide—but also because it has a mosque in its courtyard (probably erected to preserve it from Muhammadan vandalism).

Parbatsar Hukūmat.—A district in the north-east of the Jodhpur State with an area of 840 square miles, of which about one-eighth is *khālsa* or under the direct management of the Darbār; in 1901 it consisted of 165 villages containing altogether 87,127 inhabitants, more than ninety per cent. of whom were Hindus. The principal castes were Jāts (21,158); Brāhmans (8,312); Balais (6,035); Rājputs (5,991 including eighty-six Musalmāns); Gūjars (5,115); Mahājans (3,128); and Chākars (2,094). The country is much broken up by short ranges of hills and isolated knolls, some of which attain an altitude of more than 2,000 feet above the sea and are moreover fairly well wooded; the soil, though for the most part sandy, is productive, and both spring and autumn crops are grown. The yearly land revenue of the district (*khālsa* portion) is about Rs. 26,000. Agricultural statistics are available for ninety square miles, of which between one-third and one-fourth is usually cultivated; of the cropped area, *bājra* occupies about fifty, the minor millets and pulses twenty-five, *jowār* nine and barley seven per cent., and there are generally two or three hundred acres under oil-seeds, cotton and wheat. The Jodhpur-Bīkaner Railway runs through the centre of the district past the important village of Makrāna, where marble* is quarried; serpentine and steatite are found in other parts.

The headquarters of the district are at the village of the same name which is situated in 26° 53′ N. and 74° 46′ E., close to the Kishangarh border and about twelve miles south of Makrāna station

* See page 115 *supra*.

on the Jodhpur-Bikaner Railway. Population (1901) 3,069. The only public buildings are the post office and the vernacular school. An important fair, known as the Tejāji-kā-melā, is held here annually in the month of Bhādon (August-September), and attracts a large number of traders from the Punjab, the United Provinces and Gujarāt, as well as from neighbouring States of Rājputāna; it lasts for ten days, and many bullocks and donkeys change hands. The way the fair came to be held here is that, in Mahārājā Bijai Singh's time, there was a very sharp *Hākim* at Parbatsar who found that the people of his district, especially the Jāts, went in great numbers to the fair at Sursara in Kishangarh and that a good income was derived by the Kishangarh Darbār in consequence: so, knowing that the chief object which took the Jāts to Sursara was to worship at Tejāji's shrine, he made up a story that Tejā had appeared to him in a dream and expressed a wish that in future he should be worshipped only at Parbatsar. The *Hākim* next had a figure of the hero made up, and ordered all the Jāts to attend the Parbatsar fair and give up the one in Kishangarh, threatening them with punishment if they disobeyed him.

About six miles to the west of Parbatsar is the hamlet of Kinsariā, and perched on the top of a steep hill in the vicinity is the temple of Kaivāsa Mātā. The building has been so frequently repaired that very little of the original now remains; it is, however, interesting to the antiquarian as possessing on the front wall of its porch a Sanskrit inscription which, though rather weatherworn, appears* to bear the date 999 or 1,000 A.D. and to describe a new branch of the Chauhān dynasty, of which there was no previous record A mile to the east, on the outskirts of the village of Khijārpur, are the remains of a Vaishnava shrine, which is believed to be nearly twelve hundred years old. The door of the shrine is intact, and the lintel has a representation of the *garud* (or eagle) pulling the tails of serpents, while below, at the bottom of the door-frame, are Gangā and Yamunā. The only other places of any archæological interest are Maglāna and Makrāna, each of which possesses a step-well. Maglāna is about ten miles north-east of Parbatsar, and the inscription, recently found there and since removed to Jodhpur, is dated 1215 A.D. and tells us that the well was excavated in the time of *Mahārājaputra Srī Jayanta*, a feudatory of *Balanadeva* who ruled at *Ranastambhapura* (that is to say, at Ranthambhor, a famous fort in the south-east of the Jaipur State). The step-well at Makrāna has its inscription *in situ*; it is in Persian, is dated A. H. 1061 (equivalent to 1650 A.D.), refers to one Mirza Alī Beg (perhaps a local governor), and warns all the lower castes, whether Musalmān or Hindu, against drawing water from this source. Mention is made of the "twenty-fifth" year of somebody's "auspicious reign," but if that of Shāh Jahān be intended, it may be noted that he ascended the throne of Delhi in 1627.

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* See *Progress Report of the Archæological Survey of India, Western Circle*, for the year ending 31st March 1907, page 39.

Phalodi Hukūmat.—A district in the north of the Jodhpur State with an area of 2,624 square miles, of which between one-fifth and one-sixth is *khālsa*. In 1901 it contained two towns (Lohāwat and Phalodi) and seventy-one villages, having a total population of 59,619; the most numerous castes were Bishnois (8,575); Brāhmans (7,416); Mahājans (6,450); Rājputs (5,778 including 191 Musalmāns); Balais (4,073); and Jāts (3,811). The country is a sandy desert, and water is scarce. Agricultural statistics are available for an area of about 400 square miles, of which rather less than 88 square miles are ordinarily cultivated; of the cropped area, *bājra* occupies seventy-eight, the minor millets fifteen, and *jowār* between two and three per cent., while there are usually about 300 acres under wheat, sixty-eight under *til* and twenty under cotton. The land revenue realised by the Darbār averages Rs. 30,300 a year.

Lohāwat.—A town in the Phalodi district, situated in 26° 59′ N. and 72° 36′ E., about fifty-five miles north by north-west of Jodhpur city. Population (1901) 5,322. It is a commercial mart of some importance, and the home of many enterprising Mārwārī traders carrying on business in various parts of India. The principal manufactures are gold ornaments. The town possesses a post office and a vernacular school.

Phalodi Town.—The headquarters of the district of the same name, situated in 27° 8′ N. and 72° 22′ E., about seventy miles north by north-west of Jodhpur city. Population (1901) 13,924. In spite of its remote position, it has succeeded in outgrowing the more ancient towns of Pāli, Nāgaur and Kuchāwan—famous as cities of refuge in the old days—although they have for some years been served by a railway. Phalodi is a large and flourishing place, the home of many enterprising merchants who trade, in some cases, beyond the borders of India and bring back much wealth; it possesses several fine houses with beautifully carved sandstone fronts, a post office, an anglo-vernacular school, at least six Mārwārī *posāls*, and a hospital with accommodation for three in-patients. The principal manufactures are metal utensils and *gandas* or mats of camel hair.

The town is said to have been founded about the middle of the fifteenth century and, along with the district, was taken by Rao Māldeo nearly one hundred years later; it was granted to a chief of Jaisalmer (possibly Rāwal Bhīm) by Akbar, and was subsequently included for a short time in Bikaner territory, but Mahārājā Ajīt Singh eventually recovered it. The fort, attributed to Hamīr Singh, a great-grandson of Rao Sūja, is large and well-built, with walls over forty feet high; it has a capacious reservoir for water and some fine palaces, but is commanded by the Ekka hill about three miles to the south (one of the Trigonometrical Survey stations). Some ten miles to the north of the town is a large depression called the Phalodi salt source, five miles in length by three in breadth; it was leased to the Government of India in 1878 and worked till 1892, when it was closed as the operations were found to be unprofitable owing to the distance from the railway.

Sāmbhar Hukūmat.—A district in the north-east of the Jodhpur State with an area of 462 square miles, of which about one-third is the joint property of the Jodhpur and Jaipur Darbārs, namely the town of Sāmbhar and the twelve villages attached thereto. In 1901 the district was made up of the tract just mentioned and contained 14,877 inhabitants, 7,438 of whom were shown in the census tables as belonging to Jodhpur and the rest to Jaipur; but in 1902-03 the Nāwa *hukūmat* (comprising two towns, twelve villages and 24,960 inhabitants) was abolished as a separate charge and amalgamated with Sāmbhar, which thus consists at the present* time of two towns (Kuchāwan and Nāwa) and twelve entire villages *plus* a half share of Sāmbhar and its twelve villages. The population of this tract in 1901 was 32,398, and the principal castes were Mahājans (3,837); Brāhmans (2,758); Rājputs (2,197 including 401 followers of Islām); Jāts (2,010); Regars (1,558); and Sheikhs (1,432). The dual jurisdiction above referred to arises from the two States (Jodhpur and Jaipur) having jointly acquired the town and lake of Sāmbhar with sixty dependent villages about two hundred years ago; subsequently, first one and then the other, taking advantage of any temporary weakness on the part of its neighbour, appropriated an outlying village here and there until, as already stated, only twelve, besides the town, remained in joint possession.

The district is traversed by the Rājputāna-Mālwā and Jodhpur-Bīkaner Railways, which meet at Kuchāwan Road, and the yearly land revenue realised by the Darbār is about Rs. 4,650. No agricultural statistics exist for the joint villages, but the chief crops are said to be *bājra* and barley; in the old Nāwa *hukūmat* returns are available for only ten square miles, of which rather more than one-third is usually cultivated, the principal crops being *bājra*, minor millets, barley and wheat, with a little cotton, maize and tobacco. The only important *jāgīr* estate, Kuchāwan, and the famous salt-lake are both described below.

Kuchāwan.—An estate consisting of nineteen entire villages and a one-third share in a twentieth, situated in different† *hukūmats* in the north-east of Mārwār, and held by one of the first class nobles who belongs to the Mertia sept of the Rāthor Rājputs. The annual income is about Rs. 50,000, and a tribute of Rs. 3,416 is paid yearly to the Darbār. The estate was first granted by Mahārājā Abhai Singh in 1727 to Zālim Singh, whose successors have been Sabal Singh; Sūraj Mal; Sheonāth Singh, who was permitted by the Darbār to strike silver coins of the Ajmer type, known as Iktīsanda (see page 143 *supra*); Ranjīt Singh; Kesri Singh, who was a Rao Bahādur and a C.I.E.; and Sher Singh, the present Thākur, who was born in 1836, succeeded his father in 1890, received the title of Rao Bahādur in 1900, and is a member of the State Council.

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* Since this was written there has been a further change, the town of Kuchāwan and some of the villages having been transferred to the Mārot *hukūmat*.

† Six in Parbatsar, six in Merta, three in Didwāna, and the rest in Mārot.

The principal place in the estate is the walled town of the same name, situated in 27° 9′ N. and 74° 52′ E., about eight miles north of Nārāyanpura station on the Jodhpur-Bīkaner Railway. Population (1901) 10,749. The place is noted for the manufacture of muskets, swords and padlocks, and possesses a post office, several private schools, and a strong and well-built fort containing some handsome palatial residences. To the south of the town are two saline depressions, miniatures of the Sāmbhar lake in appearance and characteristics, but the small amount of salt which forms in them is so inferior as to be not worth collection.

Nāwa.—A walled town in the Sāmbhar district, situated in 27° 1′ N. and 75° 1′ E. on the northern edge of the Sāmbhar lake, and about a mile east of Kuchāwan Road station, a junction of the Rājputāna-Mālwā and Jodhpur-Bīkaner Railways. Population (1901) 5,640. There is a large export trade in salt, the manufacture of which supports a considerable proportion of the people; another important industry is the manufacture of quilts (*sozanis*) embroidered with elaborate designs. The town possesses an anglo-vernacular school, a Mārwārī *posāl*, and a hospital with accommodation for six in-patients, and though badly drained—the outlying portions being at certain seasons flooded with brackish water from the lake—is on the whole fairly healthy.

Sāmbhar Town.—The headquarters of the district of the same name; it is within the joint jurisdiction of the Jodhpur and Jaipur States, and is situated in 26° 55′ N. and 75° 11′ E. on the Rājputāna-Mālwā Railway at the south-eastern extremity of the Sāmbhar lake. Population (1901) 10,873. In the town are a post and telegraph office, eleven vernacular schools (one of which is maintained by the Darbār, and two, including a girls' school, by the Jaipur branch of the United Free Church of Scotland Mission), and a couple of hospitals—one (with four beds) kept up by the Jaipur State, and the other with (twenty beds) by the Government of India for the benefit of those employed on the salt-lake. The Devdani tank and temple, supposed to have been in existence in the very earliest ages, are held in great reverence by the people and are the scene of an annual fair.

Sāmbhar is undoubtedly a very ancient town; it was the first capital of the Chauhān Rājputs when they came to Rājputāna from the Ganges about the middle of the eighth century, and the last Hindu king of Delhi, Prithwī Rāj Chauhān, who died in 1192, was proud to be styled Sāmbhari Rao or lord of Sāmbhar. According to Tod, Rānā Mokal of Mewār seized the place at the beginning of the fifteenth century, and his grandson, Udā or Udai Karan, presented it to Rao Jodha of Mārwār, but the generally accepted story is that it was held by the Muhammadan kings and emperors of Delhi from the beginning of the thirteenth century till about 1708, when it was taken by the chiefs of Jodhpur and Jaipur, although it was occupied for a short time by Rao Māldeo (1532—69).

The famous salt-lake lies between 26° 53′ and 27° 1′ N. and

74° 54′ and 75° 14′ E., and is distant, by railway, fifty-three miles north-east of Ajmer and 230 miles south-west of Delhi. It is situated nearly 1,200 feet above sea-level, and when full is about twenty miles in length (from south-east to north-west), from two to seven miles in breadth, and covers an area of about ninety square miles. In the hot months its bed is generally quite dry but, after exceptionally heavy rains, it contains water throughout the year. The average annual rainfall at the town of Sāmbhar is nearly twenty inches, while that at Nāwa is reported to be less than fourteen. The lake is dependent for its water-supply on three rivers which empty themselves into it; of these, two come from the spurs of the Arāvalli hills to the west, and the third from the country to the north. The surrounding tract is sandy and sterile, but the view of the lake in the hot weather is very striking. Standing on the low sandy ridges to the south, one sees what looks like a great sheet of glittering snow, with sometimes a pool of water here and there, but what appears to be frozen snow is a white crisp efflorescence of salt.

According to local tradition, the goddess Sakambari (the consort of Siva), in return for some service done her, converted a dense forest into a plain of silver, and subsequently, at the request of the inhabitants who dreaded the cupidity and strife which such a possession would excite, transformed it into the present salt-lake which was named Sāmbhar (a corruption of Sakambar) after her. The source is said to have been worked by Rao Māldeo for a short time and by the imperial administration of Akbar and his successors until it was acquired by its present owners, the chiefs of Jodhpur and Jaipur; the western half belongs entirely to the former, and the eastern half, including the town, is the joint property of the two States. The lake passed for a time into the possession of the Marāthās and Amīr Khān, while from about 1835 to 1843 the British Government, in order to repay itself a portion of the expenses incurred in restoring order in Shekhāwati and the neighbouring districts, took the salt-making into its own hands. Finally in 1870 it was leased to Government for an annual payment of seven lakhs ($4\frac{1}{4}$ lakhs to Jodhpur and the rest to Jaipur) on the condition that, if the sales of salt exceeded 1,725,000 maunds (about 63,400 tons) in any year, forty per cent. of the sale price of such excess would be paid to the States as royalty. Under arrangements made in 1884, Jodhpur receives five-eighths and Jaipur three-eighths of the total royalty payable; and, in addition, a certain quantity of salt, free of all charges, is delivered yearly to each of them, namely Jodhpur 14,000 and Jaipur 7,000 maunds.

Including about 74,000 tons taken over when the lease was executed, the quantity of salt manufactured to the end of March 1906 was approximately 4,658,990 tons, or a yearly average of about 126,000 tons; the quantity disposed of during the same period, including that delivered free of cost under treaty arrangements, wastage, etc., was about 4,589,215 tons. The receipts from sale of salt have been $349\frac{1}{4}$ lakhs, and the expenditure including Rs. 253,16,203 on account of that portion of the treaty and royalty payments which

is debitable to price under the orders of Government, 309¾ lakhs, leaving a credit balance on the 1st April 1906 of 39½ lakhs or about £263,300. The average cost of extraction and storage per maund has been rather more than seven pies (or one halfpenny), or about one rupee per ton. Duty was first levied at the lake on the 1st October 1878, when the customs line was abolished. Between the 1st April 1879 and the 31st March 1906, the gross receipts from all sources have been nearly 2,633¼ lakhs and the total expenditure 302 lakhs, leaving a surplus of more than 2,331 lakhs (over 15½ million pounds sterling). The average yearly net receipts have thus been 86⅓ lakhs or about £575,500.

Salt is obtained by three methods, namely from permanent works constructed in the bed of the lake and called *kyārs*; from shallow solar evaporation pans of a temporary nature constructed on the lake-shore; and from enclosed sections of the bed on which salt forms, so to speak, spontaneously. In 1905-06 about 306,000 labourers of both sexes were employed on the extraction and storage of *kyār* salt and the storage of pan salt, and the average daily earnings were nearly five annas per head. The castes engaged in the industry are Balais, Barārs, Gūjars, Jāts, Kasais (butchers), Khatīks, Kumhārs, Mālis, Mughals, Pathāns and Regars, and nearly all permanently reside in the neighbourhood. There are three railway stations on the lake—at Sāmbhar, Gūdha, and Kuchāwan Road or Nāwa—and the line runs into all the principal manufacturing works or walled enclosures; the salt is stored close to the line and loaded direct into the railway wagons; it is largely consumed in the United Provinces, Rājputāna, Central India and the Punjab south of Karnāl, and it also finds its way into the Central Provinces, Behār and Nepāl.

The lake has been observed to furnish diminished quantities of salt during the last few years, but samples of mud, taken at depths of from four to twelve feet of the surface, have recently been found on analysis to contain six per cent. of salt, and from this fact it is roughly estimated that in the upper twelve feet of the lake-silt the accumulated salt amounts to just one million tons per square mile. As the total quantity removed by artificial means since the commencement of the British lease in 1870 has been but a little more than four and a half million tons, the system of manufacture has resulted in only a small inroad into the total stocks. To determine the origin of the salt and the prospective resources of the lake, a special investigation is being conducted by the Geological Survey of India, and the first stage has been completed. Borings made in the lake-bed at three places show that the thickness of the silt varies from sixty-one feet at the eastern end (near Sāmbhar town) to seventy near the centre (at the so-called *khazāna*) and seventy-six feet at the north-west close to Nāwa, and that the rocks below this silt are, in each case, schists of the kind cropping up around the edges of the lake, and forming the hills belonging to the Arāvalli series in the neighbourhood. It is therefore considered that the salt resources of Sāmbhar are confined to this body of silt filling in a depression of the Arāvalli schists and gneisses,

and that the soluble compounds of sodium stored in the silt have accumulated by the evaporation of the water brought in every year by the rivers which are in flood after heavy rains. The concentration of common salt and of the other less abundant sodium-compounds associated with it has been effected in a manner common to areas of internal closed drainage in all arid regions. There is nothing to show a past inroad of the ocean, and no rock-salt beds exist in the geological formation of the area. [F. Ashton, *The Salt Industry of Rājputāna* in *The Journal of Indian Art and Industry*, Vol. IX; and *Records of the Geological Survey of India*, Vol. XXXII, Part II.]

Sānchor Hukūmat.—A district in the south and south-west of the Jodhpur State, with an area of 1,776 square miles, of which only about 98 square miles are *khālsa*. In 1901 it consisted of 231 villages containing 70,401 inhabitants, and the most numerous castes were Balais (7,933); Rājputs (7,256 including 896 Musalmāns); Brāhmans (6,535); Pātels (5,234); Rebāris (4,840); Bhīls (4,286); Bishnois (4,033); and Mahājans (4,023). The Lūni attains its greatest breadth in this district and occasionally overflows its banks, leaving an alluvial deposit (*rel*) on which good crops of wheat are grown; in the south near Bhatkī is a *jhīl* or marsh which covers an area of forty or fifty square miles in the rainy season, and its bed, when dry, is cultivated with wheat and sometimes gram. In the *khālsa* villages about 94 square miles are available for cultivation, and the area usually cropped is fifty-six square miles, of which *bājra* occupies sixty-four, oil-seeds ten, and wheat from two to three per cent. The land revenue realised by the Darbār averages Rs. 13,000 yearly. The cattle of Sānchor, particularly the cows, are famous and sell for from Rs. 40 to Rs. 200 each.

The headquarters of the district are at the village of the same name, situated in 24° 45′ N. and 71° 46′ E., about 132 miles south-west of Jodhpur city. Population (1901) 2,066. The place possesses a post office, a vernacular school, a Mārwāri *posāl* and a hospital, the last having been recently transferred here from Bhatkī; the principal manufactures are brass utensils and woollen mats. In the vicinity are mounds of ruins among which massive bricks and huge blocks of richly sculptured stone have been found. The village and district formerly belonged to the Paramāras, and next to the Chauhāns who migrated here from Nādol about the end of the twelfth century; Rao Māldeo held possession for a time, but the tract was not permanently acquired by the chiefs of Jodhpur till the end of the seventeenth century.

Sānkra Hukūmat.—A district in the north-west of the Jodhpur State, with an area of 1,279 square miles; in 1901 it consisted of one town (Pokaran) and seventy-one villages—all of which are held by *jāgīrdārs*—and contained 25,960 inhabitants, chiefly Rājputs (5,454 including 251 Musalmāns); Brāhmans (2,617); Balais (2,279); Jāts (1,874); Mahājans (1,284); and Bishnois (1,101). The entire tract is sandy and sterile, and only rain crops—mostly *bājra* and *moth*—are grown; good riding camels are, however, bred here. The headquar-

ters of the district are at the village of the same name, situated in 26° 45′ N. and 71° 38° E., close to the Jaisalmer border and about one hundred miles north-west of Jodhpur. Population (1901) 755. There is a post office here.

Pokaran.—A *jāgīr* estate in the Sānkra district, consisting of one hundred villages (including the town) held by a Rāthor Rājput of the Champāwat sept (*i.e.* of the branch claiming descent from Champa, a brother of Rao Jodha), who is the *pradhān* or premier noble of the Jodhpur State and, as such, enjoys the privilege of attesting all grants of land or villages made by the Darbār, and is entitled to a seat on the *khwās*, that is to say, just behind the Mahārājā on an elephant, whence, on State occasions, he flourishes the *morchhal* or peacock feather fly-whisk over his chief's head. The annual income of the Thākur is about a lakh, and a tribute of Rs. 5,929 is paid yearly to the Darbār. The estate, which is said to be called Pokaran because it contains five (*pok*) salt-marshes (*rann*), was originally granted by Mahārājā Abhai Singh in 1728 to Mahā Singh, who was succeeded by Devī Singh, a son of Mahārājā Ajīt Singh; Sabal Singh, who was killed while attacking the town of Bilāra; Sawai Singh, who took part in the battle of Tonga (1787) and was assassinated by the notorious Amīr Khān at Nāgaur in 1808; Sālim Singh; Bhabhūt Singh; Gumān Singh; and Mangal Singh. The last named (the present Thākur) was born in 1869, succeeded by adoption in 1877, was educated at the Mayo College, and is a Rao Bahādur and a member of the State Council.

The town of Pokaran is situated in 26° 55′ N. and 71° 55′ E., about eighty-five miles north-west of Jodhpur city and sixty-five east of Jaisalmer town. It has a post office, an anglo-vernacular school and a dispensary, and, in 1901, contained 7,125 inhabitants; it stands on low ground closed in by hills to the north, south and west, and water is both plentiful and good. The small fort is well-built and strong in appearance, but is quite commanded by the adjacent hills. About two miles away are the ruins of Sātalmer, a village founded by Sātal, the eldest son of Rao Jodha, about the end of the fifteenth century, but dismantled by Rao Māldeo to find material for the Pokaran fort. The site of Sātalmer is still marked by a conspicuous Jain temple and the monuments raised to the memory of the deceased members of the Thākur's family. Close to the town is a salt-marsh about four miles in length by two in breadth, with brine about seven feet below the bed; salt was manufactured in the past, but the position of the source in a desert country remote from the railway prevents it from being profitably worked. About ten miles to the north of Pokaran is the village of Rāmdeora, founded by and called after Rāmdeo, *a famous saint in these parts; a largely attended fair is held here yearly in Bhādon (August-September).

Sheo Hukūmat.—A district in the west of the Jodhpur State, with an area of 2,004 square miles, of which about one-seventh is *khālsa*. In 1901 it contained sixty-five villages and 24,405 inhabi-

*See page 197 *supra*.

tants, and the most numerous castes were Rājputs (6,372 including 1,340 Musalmāns); Balais (3,061); Jāts (2,107); Sheikhs (1,813); Brāhmans (1,125); and Mahājans (1,052). The country is a desert and, of the *khālsa* area available for cultivation (240 square miles), only about one-sixteenth is ordinarily cultivated, *bājra* being practically the only crop grown. The land revenue paid to the Darbār is approximately Rs. 5,250 a year. Camels are bred in large numbers, and those of the Rāma Thalia strain are the best in Jodhpur for riding purposes, possessing both speed and staying power. The headquarters of the district are at the village of the same name, situated in 26° 12′ N. and 71° 15′ E., about 115 miles almost due west of Jodhpur city and thirty-two north of Bārmer station on the Jodhpur-Bikaner Railway. Population (1901) 634. A post office and a vernacular school are maintained here.

Shergarh Hukūmat.—A district in the north-west of the Jodhpur State, with an area of 1,456 square miles, of which only about one-sixteenth is *khālsa*. In 1901 it contained eighty villages, inhabited by 56,921 persons, chiefly Rājputs (19,075 including sixty-six Musalmāns); Balais (6,131); Mahājans (4,288); Brāhmans (3,590); and Jāts (3,515). The *khālsa* villages pay a yearly land revenue of about Rs. 4,300 to the Darbār. Agricultural statistics are available for an area of eighty square miles, of which nearly one-third is usually cultivated, and of this again, *bājra* occupies four-fifths and inferior food grains the rest, with the exception of some forty or fifty acres in which cotton is generally grown. As in Sānkra, good riding camels are bred in large numbers. The headquarters of the district are at the village of the same name which is situated in 26° 20′ N. and 72° 18′ E., about forty-five miles west of Jodhpur city. It is surrounded by sand-hills, and possesses a post office and a vernacular school. Population (1901) 1,884.

Siwāna Hukūmat.—A district situated in the southern half of the Jodhpur State, with an area of 760 square miles, of which rather more than one-tenth is *khālsa*. In 1901 it contained 112 villages and 53,931 inhabitants, the most numerous castes being Mahājans (8,121); Rājputs (7,223 including sixty-nine Musalmāns); Brāhmans (6,900); Balais (5,161); Pātels (4,754); Rebāris (4,001); and Bhīls (2,362). The Lūni river flows through the northern portion, and here the soil is sandy; to the south, the country is much broken up by ranges of hills, some of which are fairly well wooded and occasionally contain a few black bears. The district yields to the Darbār a yearly land revenue of about Rs. 6,120. Agricultural statistics are available for an area of nearly forty-four square miles, of which one-sixth is usually cultivated; *bājra* occupies sixty, the minor millets and pulses about eight, and wheat seven per cent. of the cropped area, while barley, cotton, *jowār* and oil-seeds are all grown to a small extent.

The headquarters of the district are at the small town of the same name, situated in 25° 38′ N. and 72° 26′ E., about sixty miles south-west of Jodhpur city, and entirely surrounded by

hills, those to the south-west attaining an elevation of 3,199 feet above the sea. Population (1901) 3,066. The place contains a post office and a vernacular school. It has been identified by some writers as the *Xoāna* of Ptolemy, "a place in the country of the Bhaolingas between the desert and the Arāvallis." The fort on a hill to the west is approached by a circuitous ascent of nearly five miles, and has more than once been besieged by the Muhammadans. In the *Tārīkh-i-Alāi* we are told that in July 1308 Alā-ud-dīn set out on his expedition against Siwāna, "a fort situated on an eminence, one hundred *pārsangs* from Delhi, and surrounded by a forest occupied by wild men, who committed highway robberies." "Sātal Deo, a *gabr*" (pagan), "sat on the summit of the hill-fort, like the *sīmurgh*" (a fabulous bird) "on the Caucasus, and several thousand other *gabrs* were also present, like so many mountain vultures. The western mangonels were placed under the orders of Malik Kamāl-ud-dīn Garg (the wolf), and some of the garrison, in attempting to escape to the jungles, were pursued and killed." A few days later, Sātal Deo was slain and the king returned to Delhi. The next mention of the place by the Musalmān historians is in the *Tārīkh-i-Sher Shāhi*, where it is related that Rao Māldeo, having been defeated by Sher Shāh, retired "to the fort of Siwāna on the borders of Gujarāt." Lastly, we learn from the *Tabakāt-i-Akbarī* and the *Akbar-nāmah* that the place was besieged for a long time (in or about the year 1574) by Shāh Kulī Khān, Jalāl Khān, Rai Singh of Bīkaner and others—all lieutenants of Akbar who failed to conduct their operations successfully, and one of whom (Jalāl Khān) met his death—and that eventually Shāhbāz Khān was given the command and took the fort in a very short time.

Sojat Hukūmat.—One of the eastern districts of the Jodhpur State and one of the most fertile, possessing numerous wells and a good deal of clayey soil on which both spring and autumn crops are grown. It has an area of 1,172 square miles and, in 1901, consisted of one town (Sojat) and 212 villages containing 109,833 inhabitants; the principal castes were Mahājans (12,811); Brāhmans (10,989); Rājputs (8,687 including forty-four Musalmāns); Balais (8,178); Sīrvis (5,206); Chākars (3,952); Jāts (3,408); Chamārs (3,323); Rebāris (3,310); and Mālis (3,035). The *khālsa* villages have an area of nearly 336 square miles and yield a yearly land revenue of about Rs. 68,200 to the Darbār. Agricūltural statistics are available for an area of 211 square miles of which one-fifth is usually cultivated, and, of the latter, *jowār* occupies thirty, *bājra* twenty-one, wheat and oil-seeds each about twelve, and barley ten per cent.; cotton, gram and maize are all grown, but not on any large scale. Sandstone is abundant, and lead mines exist at several places but are not now worked; copper and zinc are said to have been obtained in former days. The Rājputāna-Mālwā Railway runs through the district from north-east to south-west, and the Jodhpur-Bīkaner line starts from one of its stations (Mārwār Junction). Of the numerous *jāgīr* estates, the two most important (Awā and Kantālia) are described in

separate articles below, and another is deserving of mention, namely Bagri.

The Bagri estate consists of seven villages held by one of the first class nobles who is a Rāthor Rājput of the Jetāwat family, claiming descent from Jet Singh, a brother of Rao Jodha. The annual income is about Rs. 15,000, and a tribute of Rs. 1,200 is paid yearly to the Darbār. The estate is said to date from 1461 when it was conferred by Rao Jodha on Akhai Rāj, and since then there have been fifteen Thākurs, including the present holder, Pratāp Singh. From the time of Mahārājā Bakht Singh, the Thākur of Bagri has enjoyed the privilege of marking with blood drawn from his own thumb the forehead of each new chief of Jodhpur at the time of installation, and of girding on his sword. The principal place in the estate is the village of the same name, situated in 25° 54′ N. and 73° 49′ E., about four miles north-east of Sojat Road station on the Rājputāna-Mālwā Railway. Population (1901) 4,313. The village has a post office and a private school, and is noted for its lacquer-ware.

Awā.—An estate in the Sojat district, consisting of fifteen villages held by one of the leading nobles of Mārwār who is a Rāthor Rājput of the Champāwat sept. The annual income is about Rs. 30,000, and a tribute of Rs. 1,280 is paid yearly to the Darbār. It was first granted by Mahārājā Ajīt Singh in 1706 to Tej Singh, whose successors have been:—Harnāth Singh; Kushāl Singh, who served in the expedition against Ahmadābād in 1317 and died fighting for Bakht Singh against Mahārājā Rām Singh at Merta in 1752; Jet Singh, who was treacherously murdered by order of Mahārājā Bijai Singh a few years later; Sheo Singh, who died of wounds received in the battle of Merta in 1790; Mādho Singh; Bakhtāwar Singh; Kushāl Singh; Devī Singh; Shambhu Singh; and Pratāp Singh.

The last named is the present Thākur; he was born in 1885 and succeeded his father in 1897. The principal place in the estate is the village of the same name, situated in 25° 37′ N. and 73° 39′ E., five miles south-east of Awā station on the Rājputāna-Mālwā Railway. Population (1901) 2,580. Besides a post office, there is an ancient temple to Mahādeo with four inscriptions bearing dates ranging from 1072 to 1203 A.D.

Kantālia.—An estate in the Sojat district, consisting of twelve villages yielding about Rs. 16,000 annually and held by one of the principal nobles of Jodhpur who is a Rāthor Rājput of the Kūmpāwat sept and pays a yearly tribute of Rs. 1,144 to the Darbār. It was originally granted in 1645 by Mahārājā Jaswant Singh to Bhao Singh, and has since been held by Bakht Singh, who was wounded at Ahmadābād in 1731; Sangrām Singh, who was wounded in the battle of Merta (1790); Kushāl Singh; Shambhu Singh; Gobardhan Dās; and Arjun Singh. The last named is the present Thākur; he was born in 1861 and succeeded by adoption in 1886. The principal place in the estate is the village of the same name, situated in 25°

47′ N. and 73° 51′ E., seven miles south-east of Sojat Road station on the Rājputāna-Mālwā Railway. Population (1901) 2,533. A school of the indigenous type is maintained here.

Sojat Town.—The headquarters of the district of the same name, situated in 25° 56′ N. and 73° 40′ E. on the left bank of the Sukri river, a tributary of the Lūni, and about seven miles north-west of Sojat Road station on the Rājputānā-Mālwā Railway. Population (1901) 11,107. The town is walled, and possesses a post and telegraph office, two anglo-vernacular schools (one of which is maintained by the Darbār and the other by the Aryā Samāj), four or five private schools, a hospital with accommodation for four in-patients, and a dāk-bungalow. The principal manufactures are saddles, bridles, swords, daggers and cutlery, and there is a considerable trade in cotton, wool, grain and drugs. Sojat is a very ancient place and is said to take its name from the local goddess, Sejal Mātā; it was once depopulated, but was reoccupied in 1054 and passed into the possession of the Rāthors about four hundred years later. The town suffered severely from plague in 1836, when it was infected by hundreds of refugees from Pāli.

BIBLIOGRAPHY.

A. Dow.—*History of Hindustān*, London, 1812.

W. Hamilton.—*A description of Hindustān*, London, 1820.

J. G. Duff.—*History of the Marāthās*, London, 1826.

J. Briggs.—*History of the rise of the Muhammadan power*, London, 1829.

J. Tod.—*Annals and antiquities of Rājasthān*, London, 1829—1832.

J. Malcolm.—*Memoir of Central India including Mālwā*, London, 1832.

J. Sutherland.—*Sketches of the relations subsisting between the British Government in India and the different Native States*, Calcutta, 1837.

M. Elphinstone.—*History of India*, London, 1841.

J. Fergusson.—*Picturesque illustrations of ancient architecture in Hindustān*, London, 1848.

W. Erskine.—*History of India*, London, 1854.

Rājputāna Agency administration reports, annually from 1865-66.

H. G. Keene.—*The Mughal empire*, London, 1866.

H. M. Elliot.—*History of India—Muhammadan period*, Vols. I—VIII, London, 1867-77.

Reports on dispensaries, jails and vaccination in Rājputāna, annually from 1872-73.

H. Blochmann and H. S. Jarrett.—*Ain-i-Akbarī*, Calcutta, 1873-94.

G. B. Malleson.—*The Native States of India*, London, 1875.

C. K. M. Walter.—*Gazetteer of Mārwār and Mallāni*, Calcutta, 1877.

General report on the salt-producing capabilities of the State of Jodhpur, Calcutta 1877.

Rājputāna Gazetteer, Vol. II, Calcutta, 1879.

Rājputāna Census Reports, 1881, 1891 and 1901.

Report on the administration of the Mārwār State, annually from 1884-85.

E. C. Bayley.—*Local Muhammadan dynasties—Gujarāt*, London, 1886.

Great Trigonometrical Survey of India, Vol. VII-A., Dehra Dūn, 1887.

A. Cunningham.—*Archæological Survey of India*, Vol. XXIII, Calcutta, 1887.

Report of the Forest administration in the Jodhpur State, annually from 1889-90.

F. BERNIER.—*Travels in the Mughal Empire* (revised edition), Westminster, 1891.

Report on the census of Mārwār and Mallāni taken in 1891, Vols. I and II, Jodhpur, 1891 and 1894.

C. U. AITCHISON.—*Collection of treaties, engagements, and sanads*, Vol. III, Calcutta, 1892 (under revision).

W. W. WEBB.—*Currencies of the Hindu States of Rājputāna*, Westminster, 1893.

SUKHDEO PRASAD.—*The Rāthors, their origin and growth*, Allahābād, 1896.

Report on the relief operations undertaken in the Western Rājputāna States during the scarcity of 1896-97, Jodhpur, 1897.

A. ADAMS.—*The Western Rājputāna States*, London, 1899.

J. FERGUSSON.—*History of Indian and eastern architecture*, London, 1899.

C. M. DUFF.—*Chronology of India*, Westminster, 1899.

SUKHDEO PRASAD.—*Final report of the famine relief operations in Mārwār during 1899 and 1900*, Jodhpur, 1900.

Report on the famine in the Native States of Rājputāna in 1899-1900, Ajmer, 1901.

F. ASHTON.—*The salt industry of Rājputāna*—see *The Journal of Indian Art and Industry*, Vol. IX, London, 1901.

Review of the famine relief operations in the Native States of Rājputāna, 1901-02, Ajmer, 1903.

Chiefs and leading families in Rājputāna, Calcutta, 1903.

S. S. JACOB.—*Note on irrigation in the Jodhpur State*, Ajmer, 1903 and 1905.

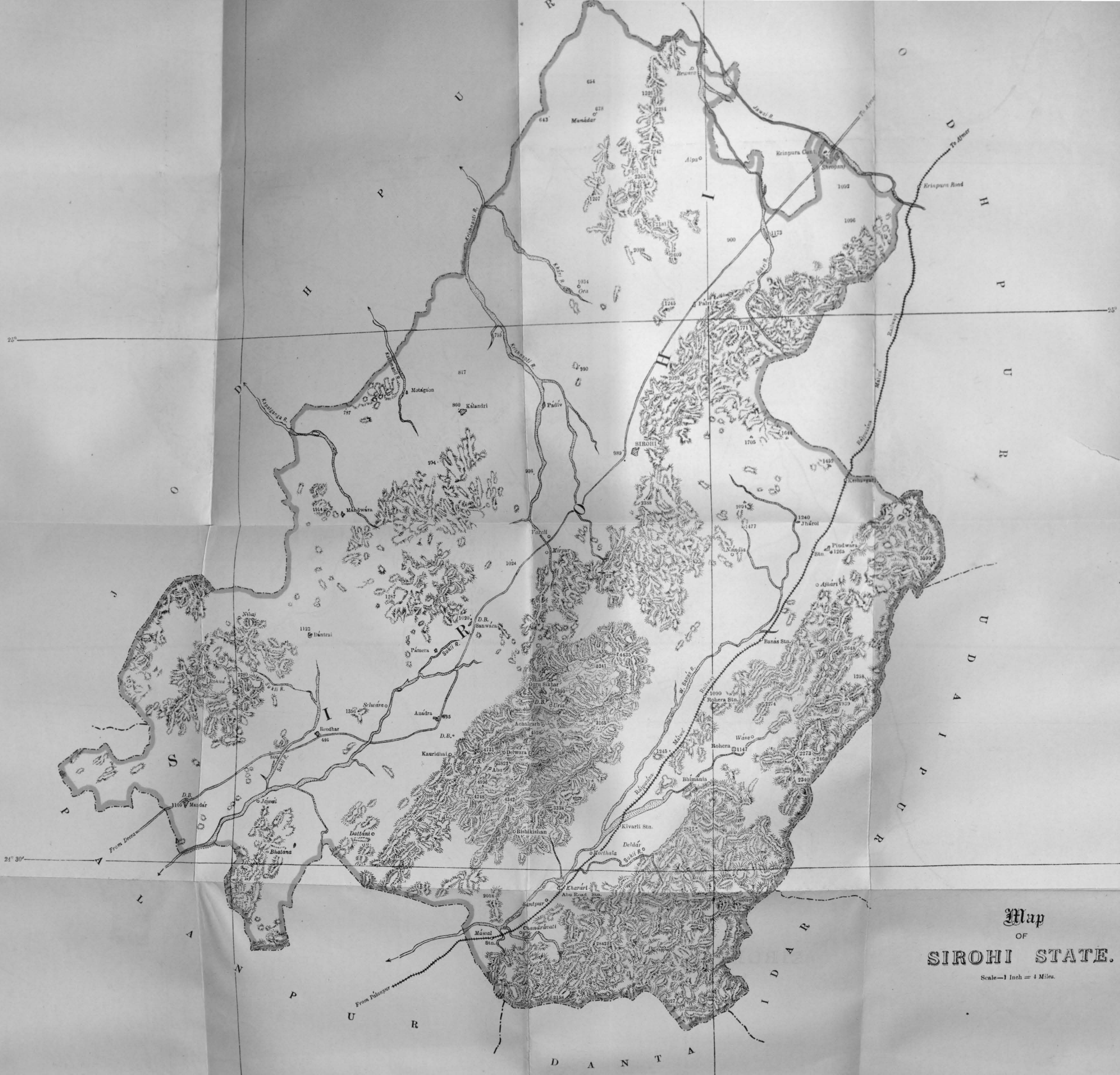
V. A. SMITH.—*Early history of India*, Oxford, 1904.

Report on the famine relief operations in Mārwār for the year 1905-06, Jodhpur, 1906.

Progress Report of the Archæological Survey of India, Western Circle, for the year ending 31st March 1907, Bombay, 1907.

PART III.

SIROHI STATE.



Map OF SIROHI STATE.

Scale—1 Inch = 4 Miles.

Photo.-Mechl. and Litho. Dept., Thomason College, Roorkee.

Photo.-Zinco., May, 1908—No. 1506.—550.

Sirohi State.

CHAPTER I.

Physical Aspects.

Sirohi is situated in the south-west of Rājputāna between the parallels of 24° 20′ and 25° 17′ north latitude and 72° 16′ and 73° 10′ east longitude; it has an area of 1,964* square miles, and is thus, in regard to size, eleventh among the twenty States and chiefships of the Province. It is bounded on the north-east, north and west by Jodhpur; on the south by Pālanpur and Dānta; on the south-east by Idar; and on the east by Udaipur; its greatest length from north to south is nearly sixty-four miles, and its greatest breadth from east to west about fifty miles. In shape it is an irregular triangle, with the apex near the village of Harjī in the extreme north and the base extending west by north-west from where the territories of Dānta, Idar and Sirohi meet to a spot about twenty-four miles north of Deesa. **Position, area, boundaries, etc.**

The State is called after its capital, the town of Sirohi, and the latter is said to take its name from the Saranwa hill, on the western slope of which it stands. Tod, in his *Travels in Western India*, has suggested that the name of the territory might be derived from its position at the head (*sir*) of the desert (*rohi*). **Origin of name.**

The country is much broken up by hills and rocky ranges. The main feature is the almost isolated mountain of Abu, the highest peak of which, Gurū Sikhar, rises 5,650 feet above sea-level; it is situated near the southern border, and is separated by a narrow pass from an adjacent range of lower hills, which runs in a north-easterly direction almost as far as the cantonment of Erinpura, and divides the State into two not very unequal parts. The western half is comparatively open and level, and consequently more populous and better cultivated than the other. Both portions, being situated at the foot of this central range of hills, are intersected by numerous watercourses (*nālas*), which become torrents of greater or less volume in the rainy season but are dry during the remainder of the year. From the line of water-parting the streams discharge into the Lūni and western Banās rivers. The Arāvalli hills form a wall on the east, and between them and the Abu-Sirohi range is a narrow valley (from 1,000 to 1,200 feet above the sea), through which runs the main line of the Rājputāna-Mālwā Railway. The lower slopes of the Arāvallis are clothed with fairly dense forest, and the country **Configuration.**

* This is the area as calculated in the Surveyor General's office by planimeter from the standard sheets; the local authorities say the area is about 3,020 square miles.

generally is dotted with low rocky hills which, as a rule, are thickly covered with jungle, consisting chiefly of the *dhao* tree (*Anogeissus latifolia*) mixed with *khair* (*Acacia catechu*), *babūl* (*A. arabica*), *ber* (*Zizyphus jujuba*), etc.

Hill system. The Arāvallis need no lengthy description as, with the exception of the Belkar peak (3,599 feet above the sea), only the lower skirts and outlying spurs of this range are situated within Sirohi limits. As they approach the south-eastern corner of the State, they spread out over the tract known as the Bhākar, which consists of successive ranges of steep and rugged hills of no great height. This part of the country was formerly notorious as a refuge for marauders and outlaws, and is still inhabited by wild Girāsias and Bhīls who have caused much damage to the forests by felling and burning trees, preparatory to practising that peculiar system of agriculture styled *wālar* or *wālra*. Mount Abu is noticed in a separate article in Chapter VI below, and it will suffice here to state that it and the Sirohi range may, together with the numerous adjacent hills, be considered as outposts of the Arāvallis. Gurū Sikhar, the highest point between the Himālayas and the Nīlgiris, is situated towards the northern end of Abu, while the principal peaks of the Sirohi range vary in height from 2,000 to 2,500 feet above the sea. From the north-western spurs of the group last mentioned a line of detached hills branches off in a northerly direction to the Jodhpur border, and ends in the Māl Pahār (2,737 feet). To the south-west of Abu several ranges extend for some distance into Pālanpur, and among these, Chotīla (2,755 feet) and, just beyond it, Jai Rāj (3,575 feet) are the most prominent eminences; both form the boundary between Sirohi and Pālanpur. Westward of Abu, in the south-west corner of the State, are the Nandwār or Nandwāna hills, generally known as the Nībaj hills, which attain an altitude of 3,277 feet, while numerous detached peaks and groups are to be found further to the north.

River system. Western Banās. The only river of any importance is the western Banās which, rising on the eastern slope of the hills behind the town of Sirohi, flows for ten miles in a south-easterly direction as far as Jhārol (near Pindwāra) and then, turning to the south-west, continues its course for another forty miles or so through the valley between Mount Abu and the Arāvallis till it enters Pālanpur territory a little below the village of Māwal; it eventually loses itself in the sand at the head of the Rann of Cutch. Within Sirohi limits, the western Banās is not perennial, and usually ceases to flow about the middle of the cold weather, leaving pools of water here and there. The bed is sandy and rocky, and the banks, though never high, are often shelving. Like all mountain torrents, the river is subject to occasional floods, but these soon subside, leaving the stream fordable and the water clear and good. Near Abu Road it is crossed by a fine bridge of seventeen spans of thirty-five feet, which was constructed between 1887 and 1889 at a cost of about a lakh of rupees, contributed partly by the Government of India and partly by the Native States whose interests were mostly concerned.

Many streams carry the drainage of the hills on either side into the western Banās, but its most important tributary is the Sukli which has two branches, the western and eastern. The former rises in the hills near Dāntrai, and flows first south-east and next south by south-west for about fourteen miles till it joins the eastern branch near Jāwāl; it generally contains water throughout the year, though in no great volume. The eastern branch comes from the Sanwāra hills and the north-western slopes of Abu, and has a length of about twenty-five miles as far as Jāwāl; after leaving Anādra, it becomes quite a broad river with high banks, but its bed is usually dry soon after the rains. The united streams, under the name of Sīpu, continue in a south-easterly direction till they fall into the western Banās near Chhota Rānpur in the Pālanpur State. Sukli.

Of the numerous other rivers and streams, the more important are found in the north and west, and all of them flow north-west into Jodhpur and eventually join the Lūni. Other rivers.

The largest and longest is the Jawai, which rises in the Arāvallis near the base of the Belkar peak and passes close to the cantonment of Erinpura on the north-eastern border; but only eight miles lie in or along the borders of Sirohi, and it is almost entirely a river of Jodhpur. Jawai.

The Sukri has its source in the hills south of Nāna, and, after flowing for about nine miles through Jodhpur territory, enters Sirohi; it has a total length of twenty-nine miles, joins the Jawai just beyond the northern frontier, and, with its tributaries, drains an area of about 210 square miles. Sukri.

The various *nālas* which form the Khāri rise on the western slopes of the hills north of Sirohi town, and unite about seven miles from their source at the village of Ora; thence the river continues in a north-westerly direction for another nine miles when, on being joined on the left bank by the Krishnaotī, it passes into Jodhpur and, some thirty miles lower down, falls into the Jawai (or Sukri, as it is sometimes called). The Khāri drains an area of about 130 square miles in the Sirohi State, and there is an excellent site for a storage reservoir at Ora. Khāri.

Further to the south-west are the Kachmaoli (an unimportant tributary of the Khāri) and the Kapalgangā; the latter rises in the Sanwāra plateau and, after a north-westerly course of twenty miles, enters Jodhpur and soon after joins a river called the Sukri, which should not be confused with either of the two of the same name mentioned above. Minor streams.

No natural lakes exist, but there are traces of old artificial ones at Garh (in the east) and at other places. Speaking generally, the subsoil appears unsuitable for the artificial storage of water. Of existing lakes and tanks, the picturesque Nakhi Talao on Abu holds pride of place; it is described in Chapter VI. At the foot of the Abu hill and eight miles west of Abu Road is Chandela, an old reservoir which was enlarged and improved during the last famine and is capable of irrigating 675 acres, while to the north-east near Pindwāra is Lakes.

a tank constructed in honour of the diamond jubilee of Her late Majesty; it has a catchment area of seven square miles and a capacity of fifty-six million cubic feet (or sufficient for 560 acres), but, though it fills easily every year, all the water unfortunately disappears in a few weeks in consequence of leakage between the two dams. In addition to the above, there are two or three tanks at or near the capital, but they are not used for irrigation.

Geology.

The whole of Sirohi is occupied by schists and gneisses belonging to the Arāvalli system, traversed by dykes of granite. Mount Abu is formed of a highly felspathic, massive and crystalline gneiss with a few schistose beds. Traces of gold were found in some ferruginous bands of quartzose schist near Rohera railway station in 1897, and the remains of old workings, which do not appear to have been more than prospecting trenches, are to be seen in the neighbourhood.

Botany.

A considerable portion of the State is covered with trees and bush jungle. The prevailing tree is the smaller *dhao (Anogeissus latifolia)*, which is found on most of the low rocky hills scattered over the country; when thus situated, it attains to no size and, from its irregular growth and branching habits, is of little use except for firewood, but in more favourable places, such as the lower slopes of Abu, it reaches a fair size, and its wood, being tough, is used for carts and agricultural implements.* In the immediate neighbourhood of the villages such trees as the *nīm (Azadirachta indica)*, the *pīpal (Ficus religiosa)*, the *bar (F. bengalensis)*, the *gūlar (F. glomerata)*, the *ber (Zizyphus jujuba)* and the tamarisk *(Tamarix dioica)* are common. The bush jungle, which covers three-fourths of the plain country, consists chiefly of a second species of *ber (Zizyphus nummularia)*, the *anwal (Cassia auriculata,)* and the *khair (Acacia catechu)*, together with *khejrā (Prosopis spicigera)*, *babūl (Acacia arabica)*, *jhāl* or *pīlu (Salvadora persica* and *S. oleoides)*, and *karel (Capparis aphylla)*. The *thor (Euphorbia neriifolia)* is found generally throughout Sirohi, especially on the hills round the base of Abu; and in other parts, where the soil is deep and good, there are numbers of the *dhāk* tree *(Butea frondosa)*, the bark from the roots of which, owing to its durability under water, is much used in making ropes for the water-pots of Persian wheels.

On the slopes and round the base of Abu the forests contain a great variety of trees and shrubs Among the most common are the bamboo *(Dendrocalamus strictus)*; the *ām* or mango *(Mangifera indica)*; two or three species of *dhao (Anogeissus latifolia* and *pendula*, etc.*)*; the *bel (Ægle marmelos)*; the *haldu (Adina cordifolia)*; the *siris (Albizzia Lebbek)*; the *jāmun (Eugenia jambolana)*; the *kachnār (Bauhinia purpurea)*; the *tīmru (Diospyros tomentosa)*; the *semal (Bombax malabaricum)*; the *dhāman (Grewia oppositifolia)*; the *rohīra (Tecoma undulata)*; the *phālūdra (Erythrina arborescens)*; the *aonla (Phyllanthus emblica)*; and the horse-radish tree *(Moringa concanensis)*. The flora of Mount Abu itself is dealt with in Chapter VI below, and includes several plants and shrubs which could not exist in the dry hot plains.

The pasture-lands are extensive, and the best grasses are locally called *karr* and *jenjua*; both are of moderate height and good substance. Then comes *gendu*, reddish in colour, somewhat coarse, and more suited for buffaloes than cows; and *bharūt* or spear-grass, which is eaten when green in the rains by cattle, but is not popular when ripe as the barbed seeds are apt to stick in the mouth. The last of the fodder grasses is *lāmp*, which is of inferior quality and low growth, and is always found on poor and rocky soil.

Fauna. The fauna is rather varied, though not very plentiful. In olden days lions were sometimes met with in the south, but they have not been heard of since 1872, when a full-grown female was shot on the Anādra side of Abu by a Bhīl *shikāri*. Tigers and black bears are still found on the Abu-Sirohi range and in the Nībaj hills in the south-west, but appear to be becoming scarcer every year; *sāmbar (Cervus unicolor)* used to be plentiful in the same localities, and some fine heads have been bagged, but many of these animals died or were killed by the Bhīls during the famine of 1899-1900, and they are now only fairly numerous. Panthers are of course common and, as in all hill stations, often very bold on Abu, while *chītal (Cervus axis)* confine themselves to the grass-lands and lower slopes of the Arāvallis in the south-east. Wild pigs are found in most of the hills, but the *nīlgai (Boselaphus tragocamelus)* is seldom seen, and black buck are comparatively rare as they prefer rather more open country; ravine dear *(chikāra)* are fairly common, and the four-horned antelope less so. Wolves are said to be unknown.

As regards small game, grey partridge, hares, several varieties of quail, and two kinds of sand-grouse (the common and the painted) abound, but the latter are not so numerous as in Jodhpur, Bikaner and the north of Jaipur. Black and painted partridge are occasionally met with in the south, but there is very little ground suitable for such cold weather visitants as duck, geese, snipe and teal. Floricans inhabit some of the large grass-preserves (particularly in the east) for a short time during the rains, while jungle-fowl and spur-fowl are always plentiful on Abu and some other high hills.

The Abu Wild Birds Protection Law of 1889 extends not only to that hill but to Anādra (at the western base) and Kharāri (including the road leading from the Abu sanitarium to Abu Road railway station and the bazar at the place last mentioned). Within the above area, the shooting of *sāmbar*, *chītal*, four-horned antelope and hare is prohibited between the 1st April and the 1st October, and of partridges, jungle-fowl and spur-fowl between the 15th March and 15th September. Moreover, no person is permitted to shoot without a license, which is ordinarily obtainable from the Magistrate of Abu on payment of a fee of Rs. 16, or, in the case of Native chiefs and their adherents, from the Sirohi Darbār. The fee is the same for one entire season or for any portion thereof, and not more than two head of four-footed game (excluding hares) may be shot during the first ten days following the issue of the license, and thereafter only one head during each subsequent period of ten days

covered thereby. The slaughter of does, and the destruction or molestation of water-fowl on the Nakhi Talao are strictly prohibited by rules issued under the Law of 1889, while one of the conditions on which the Darbār agreed (in 1845) to the establishment of a sanitarium on Abu was that no pigeon or pea-fowl should be killed here.

Climate and temperature.

The climate of the plains of Sirohi is on the whole dry and healthy, and there is a general freedom from epidemic diseases. The heat is never so intense as in the north of Rājputāna, but on the other hand the cold season is of much shorter duration and less bracing. The climate of Abu is very agreeable and salubrious for the greater portion of the year. The hot weather commences about the middle of April, and the temperature at midday is at times rather high for a hill station, having on two or three occasions exceeded 100° in the shade; but this is very unusual, and as a rule the thermometer seldom registers over 94° or 95°. It is said that the temperature has increased since the hill was first occupied as a sanitarium owing to the reckless felling of trees and the consequent drying up of several springs and streams at an early period of the year. The rainy season on Abu is rendered somewhat unpleasant by the prevalence of fog and drizzle and the intense moisture of the atmosphere, but there is none of the stifling damp heat of the plains and very little sickness. A short interval of warmer weather follows the monsoon, and during this period there is a good deal of fever and ague, especially among the natives, but the disease is generally of a mild type. From December to the end of February the climate is healthy and bracing, and fires are required; frosty nights are frequent, thin ice sometimes forms on still water, and a cold north-easterly wind often blows over the hill.

Statistics relating to temperature are available only for Mount Abu, and from the year 1877. The mean temperature is about 69°, varying from 59° in January to 79° in May, and the average diurnal range is about 14° (7° in August and 17° in May). The maximum temperature recorded has been 101° on the 7th May 1881, and a fraction less on the 25th May 1887 and the 9th May 1897; similarly, the minimum was 30·9° (in the shade) on the 18th December 1880, and 11·5° (on the grass) two days later. Some further details will be found in Tables Nos. XXXV and XXXVI in Vol. III—B. The mean temperature at Erinpura and Sirohi is reported to be about 83° or 84°.

Rainfall.

The southern and eastern districts usually receive a fair amount of rain, but over the rest of the State the fall is frequently scant. This is chiefly due to the influence of the Abu and Arāvalli hills on the clouds driven inland by the south-west monsoon; thus, at Abu the annual rainfall averages between 57 and 58 inches, while at Sirohi, twenty-three miles to the north, it is less than 20, and at Erinpura, about the same distance still further north, is only 18 inches. A reference to Table XXXVII will show that the annual average fall at Abu during the thirty-six years ending 1906 has been 57·30 inches, of which 21·20 are usually received in July, 18·10 in

August, 10·38 in September, and 4·67 in June; in other words, nearly ninety-five per cent. of the total supply is received during these four months. In four of the last thirty-six years the rainfall has exceeded 100 inches, namely in 1875, 1881, 1892 and 1893, while in only three years (1899, 1901 and 1904) has it been less than 20 inches. The maximum fall registered at the Abu observatory was 130·30 inches in 1893, and of this amount fifty* inches fell in ninety-six* consecutive hours during September; the minimum fall on the other hand was 11·42 inches in 1899. Tables Nos. XXXVIII and XXXIX relate to Sirohi town and the cantonment of Erinpura, where the yearly averages are 19·69 and 18·06 inches respectively. At the former of these places the fall has varied between 42·11 inches in 1893 and 5·51 in 1901, while at Erinpura the maximum was 35·56 inches in 1892 and the minimum 7·20 in 1899.

Earthquakes. Earthquakes are not uncommon on Abu—indeed, no year passes without a vibration or two of sorts—but fortunately the shocks are as a rule very slight, and there is no record of a really destructive one. The people tell of a somewhat severe earthquake in 1825 and again in 1848, both of which caused damage to houses and cracked some of the arches of the Delwāra temples; a third was reported on the 2nd December 1866. There was a succession of rather alarming vibrations not only at Abu but generally throughout the State on the 9th October 1875; the noise was described as resembling that of a railway train at speed, and the motion was sufficient to make glasses jingle on the table and induce some of the inhabitants to spend the entire night out-of-doors. In recent times the most severe shocks have been those of the 15th December 1882 and the 15th October 1898; the former did some damage to the walls of houses, and continued interruptedly for two months. The popular idea is that Abu rests on the horns of a great bull who, when displeased by the sins of the people, shakes his head and causes an earthquake. Others say that the importation of beef is always followed by a shock; and in this connection it should be explained that, under the agreement of 1845, the bringing of beef up the hill is strictly prohibited, but it is sometimes smuggled in by cooks.

Floods. In years of unusually heavy rainfall the rivers and mountain streams come down in considerable volume, and inundate all low-lying lands in the vicinity. In 1875 it rained incessant torrents on Abu for a week, and the floods, which were unprecedented, carried away any Persian wheels they came across and caused much damage to the *kharīf* crops; a somewhat similar calamity occurred in September 1893, but was less destructive.

* Another large fall was 16·53 inches during the twenty-four hours ending 8 *A. M.* on the 20th August 1907.

CHAPTER II.

HISTORY.

Genealogy.

The chief of Sirohi is the head of the Deora sept of the Chauhān clan of Rājputs; and the Chauhāns, as is well known, are one of the four Agniculas or Fire tribes who are supposed to have been brought into existence by a special act of creation of comparatively recent mythological date. The following is the popular account of their origin. The Kshattriyas, or fighting and kingly caste, had become so arrogant and tyrannous in their behaviour that Parasu Rāma resolved to punish them, and the *Mahābhārata* tells us how "thrice seven times he cleared the earth of the Kshattriya caste, and filled with their blood the five mighty lakes of Samanta-pachaka," giving the land to the Brāhmans. The result, however, was not what had been hoped for, as both gods and men—particularly the Brāhman—soon began to feel the loss of their natural protectors; the earth was overrun by giants and demons (Daityās and Asurās), the sacred books were held in contempt, and there was none to whom the devout could appeal for help in their troubles. In this predicament, Viswāmitra, a Kshattriya who had raised himself to be a Brāhman by the might of penance, determined to revive the race that had been exterminated, and moved the gods to assemble for this purpose on Mount Abu. The request was complied with, and Siva arrived at the fire-pit * (*Agnī-kūnd*), bringing with him Brahmā, Vishnu, Indra, and all the minor deities. After some discussion as to who should start the work of creation, the Paramāra or Ponwār was brought into existence by Indra, the Chālukya or Solanki by Brahmā, the Parihār by Siva, and finally the Chauhān by Vishnu. The last of these was four-armed like the god himself—whence his name Chauhān—and carried a weapon in each hand; he has been described as "lofty in stature, of elevated front, fierce, terrific, clad in armour, with hair like jet, eyes rolling, and breast expanded." The new-born warriors issued out against the demons, but strove for a time in vain; eventually, however, the leaders of the Daityās were slain, and "the rest fled, not halting till they reached the depths of hell." According to another version, the three that were first created all failed to subdue the demons, and it was left to the Chauhān (single-handed) to kill and disperse them. Be this as it may, "the success was hailed with supreme delight in heaven; the gods rained down ambrosia upon the victors, and the Brāhmans were made happy."

Early history.

As regards the early history of the Chauhāns, a reference is invited to Tables Nos. XL and XLI in Vol. III-B. So far as is known,

* It is close to a place called Gao Mukh, about two miles south of the civil station of Abu.

they ruled at a place called Ahichhatrapur on the Ganges, and Sāmant Rāj migrated to Sāmbhar about the middle of the eighth century. Some two hundred years later, Wākpati Rāj I was Rao and had two sons, the elder of whom (Singh Rāj) succeeded him, while the younger, Lakshman Rāj or Lākhan, left the parental roof to carve out a principality for himself and, journeying south-west, settled at Nādol, now in Jodhpur territory. The senior branch remained at Sāmbhar till the end of the eleventh or the beginning of the twelfth century, when Ajā or Ajai Pāl built the city of Ajmer, and transferred thither the seat of government. His successor Anā or Arno Rāj (who is mentioned in an inscription as being alive in 1149) built the embankment of the Anāsāgar, and a few years later his son, Visaldeo or Vigraha Rāj IV, wrested Delhi from the Tonwar Rājputs, and made it his capital. The Chauhān dynasty of Delhi ended with the famous Prithwī Rāj III, a nephew of Visaldeo and the "Rai Pithora" of the Musalmān historians; he ruled from 1169 to 1192, and built the city, the walls of which may still be traced for a long distance round the Kutb Minār. In 1191 he led his vassals and allies to defeat Muhammad of Ghor at Tirāwari in the Karnāl District of the Punjab, but he met with a decisive overthrow at the same place in the following year, and lost both his life and his kingdom. Prithwī Rāj left a son who was made Rājā of Ajmer by the Musalmāns, but he was turned out by his uncle, Har (or Hari) Rāj, who soon after committed suicide.

The Chauhāns of Sāmbhar.

The Chauhāns of Ajmer.

The Chauhāns of Delhi.

So much for the Chauhān kings of Sāmbhar, Ajmer and Delhi. Let us now return to Lakshman Rāj whom we left at Nādol; he took that town and the adjacent country from the Paramāras towards the end of the tenth century, and a list of his successors will be found in Table No. XLI in Vol. III-B. The eleventh after him was Asrāj, whose younger son, Mānik Rai, migrated to the east and took up his abode in the south-eastern corner of Mewār at or near Būmbāoda, Menāl, etc. The Būndi and Kotah houses trace their descent from him, and the subsequent history of this branch of the family will be given in Vol. V-A. of this series of Gazetteers. Asrāj was succeeded at Nādol by his eldest son, Alhan, who was followed in turn by three sons, Kelhan, Gaj Singh, and Kīrtti Pāl or Keytu; the last was driven out of Nādol by Kutb-ud-dīn, but he and his clansmen soon established themselves further to the south-west at Bhīnmāl and Sānchor, and subsequently took the fort of Jālor from the Paramāra Rājputs. The three places last mentioned are all now in Jodhpur territory, and these events occurred at the end of the twelfth century. After Kīrtti Pāl came Samar Singh, and then Udai Singh who surrendered Jālor to Shams-ud-dīn Altamsh in or about 1210, but it was restored to him a little later on. Udai Singh's eldest son, Chāchik Deo, succeeded him, while his brother,* Mān or Mahā Singh, was the founder of the Sirohi house. The last of the Chauhān rulers of Jālor was Kānar Deo, a grandson of Chāchik Deo, who lost his kingdom to Alā-ud-dīn in the beginning of the fourteenth century.

The Chauhāns of Nādol.

The Chauhāns of Jālor.

*Some say that Mān Singh was the younger son (not brother) of Udai Singh.

Having thus rapidly sketched the career of the Chauhāns at Sāmbhar, Ajmer, Delhi, Nādol and Jālor during a period of about 550 years, we may now confine ourselves to the history of the branch from which the chiefs of Sirohi claim immediate descent. Very little trustworthy information is available owing, it is said, to the greater portion of the chronicles and records having been destroyed by the Jodhpur army in the time of Mahārājā Mān Singh of Mārwār (about 1804-05).

Deorāj, the founder of the Deora sept of Chauhāns.

Mān Singh or Mahā Singh—not to be confused with the Rāthor chief just mentioned—must have lived about the middle of the thirteenth century and, as the brother of Rao Udai Singh of Jālor, received some villages for his maintenance; these eventually passed to his son, Pratāp Singh *alias* Deorāj, after whom the sept is called Deora. The last named was followed by his son *Bijad* or *Bigarjī*, in whose time two villages—Mandār in the south-west and still within Sirohi limits, and Badgaon in the same direction but now belonging to Jodhpur—are said to have been acquired. Little is known of the old history of the country now called Sirohi, in which the Deoras thus for the first time secured a footing. The earliest inhabitants were perhaps Bhīls and after them the Gahlots are mentioned as the first Rājputs to settle here; this is not improbable as the latter tribe, according to the Mewār bards, established a petty principality in and about Idar in the middle of the sixth century. The Gahlots were shortly followed by the Paramāras, whose ancestor, as already related, was created at the fire-pit on Abu; they appear to have been a very powerful race, and at one time owned so much territory that "the world is the Paramāra's" was a common saying. Prior to their arrival in this part of Rājputāna, no grain was sown, and the Bhīls subsisted on their flocks, the wild products of the jungle, and by the chase; the Paramāras are said to have only partially dispossessed the aboriginal races, but they introduced agriculture, and built several towns and villages, the chief of which was Chandrāvati on the bank of the western Banās. Their last great king was Dhārāvarsha, whose brother, Prahlādan Deo, founded the town of Pālanpur (Prahlādan Pātan).

Rao Lūmbha.

Capture of Chandrāvati and Abu about 1303.

Bigarjī (mentioned above) was succeeded by his son, Lūmbha, in whose time there was constant fighting between the Deoras and the Paramāras; the latter were driven from Chandrāvati about 1303 and forced to seek shelter on Abu. This place was too strong to be attacked with any hope of success, so Lūmbha resorted to stratagem and sent a proposal that the Paramāras should bring twelve of their daughters to be married into the Chauhān clan and thus establish a friendship. The overture having been accepted, the story runs that the girls were accompanied to Vāreli (or Bāreli), a village north-west of Abu, by nearly all the Paramāras; the Deoras then fell upon them, massacred the majority and, pursuing the survivors back to Abu, gained possession of the hill.* Another version is to the effect that

* It is said that the Loks who now inhabit Abu are descended from the Paramāra Rājputs by Bhīl women and, in memory of this act of treachery, never allow their daughters to go down to the plains to be married.

the Chauhāns were to supply the brides, not the bridegrooms; the discrepancy is unimportant as the results were identical.

Lūmbha is said to have died in 1321, and nothing is known of his four immediate successors—Tej Singh, Kānar Deo, Salkha and Rin Mal or Rur Mal—except that the first is mentioned in an inscription at Achalgarh dated 1330, and the second in one in the temple at Gao Mukh dated 1337; all four appear to have had their capital sometimes at Chandrāvati and sometimes at Achalgarh (about four miles north of Abu). After Rur Mal came Rao Sobha (also called Sheo Bhān) who founded the old town of Sirohi in 1405, but, the site proving unhealthy, his son, Sains Mal, abandoned it twenty years later and built the present capital a short distance to the west. Sains Mal is said to have enlarged his dominions by driving the Solankis from the tract known as Māl Magrā in the north, but no materials exist to show exactly what territory the Deoras acquired in olden days; they probably held all they could keep, which was considerably more than what they now possess. At any rate, they owned districts to the north and west of the present limits which were in time wrested from them by the Rāthors, and also some country to the south which afterwards became absorbed into Pālanpur owing to many of the Thākurs having sought the protection of that State in consequence of the disorganisation of the Sirohi government.

Rao Sobha founds the old town of Sirohi in 1405.

Rao Sains Mal builds the present capital in 1425.

Sains Mal died about 1451, and it was in his time that Rānā Kūmbha of Mewār, having been defeated by Kutb-ud-dīn of Gujarāt, took refuge at Achalgarh and subsequently, when the Musalmān army had retired from his territories, refused to leave such a place of vantage, and had to be forcibly expelled by Lākha, the son and successor of Sains Mal, with the aid of troops from Gujarāt and Mālwā. This is the local story, and it is stated that, in consequence of this affair, Rao Lākha swore that no chief should ever be allowed on the hill—an oath which remained in force till 1836 when, through the intervention of Colonel Speirs (then Political Agent of Mewār), Mahārānā Jawān Singh was permitted to proceed to Abu on a pilgrimage to the temples. Since then the prohibition has been withdrawn, and several chiefs of Rājputāna now visit the place yearly. The Muhammadan* version of the expulsion of Rānā Kūmbha is to the effect that in 1456 Kutb-ud-dīn, while on his way to invade Mewār, "was waited on by Khatia† Deora Rājā of Sirohi, who came to complain that the Rānā had taken from him by force the fort of Abu, which had been the abode and refuge of his ancestors, and entreated the Sultān to right him by recovering it." Malik Sha'bān Imād-ul-Mulk was ordered to wrest the fort from the adherents of the Rānā and make it over to Khatia but, having "never been employed on such a service before, he went in among narrow and difficult passes in the hills in an unsoldierly manner; the enemy opposed his advance and poured down on him on all sides from the heights, and he was

Rao Lākha.

* *Mirāt-i-Sikandarī.*

† This must be Rao Lākha; there was no chief of Sirohi locally known as Khatia at this or any other period. The "fort of Abu" is of course Achalgarh.

defeated with the loss of many men." In the following year, however, Kutb-ud-dīn proceeded in person against Abu, "reduced the fort, and handed it over to Khatia Deora."

Rao Jag Mal. It is not known when Rao Lākha died, but he was succeeded by his son, Jag Mal, who is mentioned as fighting on the side of Rānā Rai Mal of Mewār against one of the kings of Delhi in 1474 or 1475; the latter (who must have been Bahlol Lodī) was "so completely routed that he never again entered Mewār," and the Rānā gave one of his daughters in marriage to Jag Mal, "confirming his title to Abu as her dower." In 1487 a party of merchants complained to Mahmūd Shāh Bigārha of Gujarāt that the chief of Sirohi had looted them of horses and fabrics at the foot of Mount Abu, "and had not left them even an old pair of trousers." A strongly-worded letter was thereupon sent to the Rājā, "requiring him to give up instantly the horses and goods he had seized, or the Sultān and his army would follow immediately." Jag Mal, on receiving this communication, surrendered everything, "sent a suitable tribute, and abjectly sought forgiveness."

The successors of Jag Mal were:—(i) his eldest son, Akha or Akhai Rāj I, who has a local reputation for bravery, is said to have captured the Musalmān governor of Jālor (releasing him only on payment of a heavy ransom), and built (in 1525) the fort of Lohiāna, which was levelled to the ground in 1883-84, and is now represented by the village of Jaswantpura* (in Jodhpur territory); (ii) Rai Singh, son of Akhai Rāj, who helped to defend Chitor when besieged by Bahādur Shāh of Gujarāt in 1534, and met his death in a battle with the king of Delhi's troops at Bhīnmāl about ten years later; (iii) Udai Singh, son of Rai Singh, who succeeded as a minor and died in 1562; (iv) Dūda, a brother of Rai Singh, who had acted as regent during the minority of his nephew; and (v) Mān Singh II, the son of Dūda. There is, however, a difference of opinion as to the order in which the above chiefs ruled, and as to whether one or two of them ever ruled at all. Some authorities do not mention Rai Singh, and give Dūda as the successor of Akhai Rāj; others say that Dūda was the minor and his uncle, Udai Singh, was regent; while others assert that Udai Singh was never Rao of Sirohi, and that Dūda followed his elder brother, Rāi Singh. It is generally agreed that Mān Singh II succeeded his father, Dūda, about 1562 and ruled for nine years, when he died suddenly at Abu; some think that he was poisoned. The small temple at the northern end of the tank at Achalgarh is said to mark the spot where he and his five Rānīs were cremated.

Rao Sūrthān. Mān Singh left no heir and, though a posthumous son was born to him at Bārmer, the child died immediately on arrival at Sirohi, and Sūrthān, a descendant of Rao Lākha, was selected as chief of the Deoras. He is said to have been opposed first by his minister (*musāhib*) Bija, and next by Kalla (a grandson of Jag Mal) who had the support of Rānā Udai Singh of Mewār, but, though both in turn

* See page 190 *supra*.

usurped the *gaddi*, neither occupied it for any long period. Sūrthān was the contemporary of the emperors Akbar and Jahāngīr, and has been described as a reckless and valiant chief "who, in his pride, shot his arrows at the sun for daring to shine upon him" and who, though repeatedly defeated by the imperial armies, refused to acknowledge the supremacy of the Mughal. According to some authorities, he ruled for fifty-one years (*i. e.* till about 1622) and fought in fifty-two battles, while others say that he died in 1610 or 1611.

The Musalmān historians call him Sarmān or Sultān Deora, and first mention him in 1572. Akbar was on his way to Gujarāt, and had sent on a force in advance under Mir Muhammad Khān; the latter had reached Sirohi when "the Rājā of that place professed subjection and obedience, and sent some Rājputs as envoys to wait upon him." The envoys having delivered their message, Muhammad Khān gave them an appropriate answer and fine robes, and then, "according to the etiquette observed among the people of India," dismissed them with his own hand. At this moment, one of the Rājputs "stabbed the Khān in the breast, the weapon piercing through to his back under the shoulder;" the assassin was immediately cut down, and the Khān's wound, having been promptly attended to, healed in fifteen days. When the emperor himself arrived at Sirohi, "eighty Rājputs in a temple and seventy in the Rājā's house stood ready to perform the vow they had made to die. In a few moments they were all despatched. Dost Muhammad, son of Tātār Khān, perished in the Rājā's house."

The next event of importance occurred in 1576. The "*zamīndār* of Sirohi," as Sūrthān is styled, "from distrust again assumed a hostile attitude, and Rai Singh of Bīkaner marched against him and besieged his capital. During the siege, Rai Singh called his family to his camp, but Sūrthān fell upon the caravan, killed several relations of Rai Singh, and then withdrew to Abugarh." In the meantime, Sirohi was captured and Abu was subsequently surrendered, whereupon Rai Singh, leaving a garrison at the latter place, took the Deora to Akbar's court. Sūrthān probably soon recovered his lost possessions, and seven or eight years later (1583-84), we find his territory being again invaded by imperial troops, commanded on this occasion by Rai Singh Chandrasenot, a grandson of Rao Māldeo of Jodhpur. Sirohi was once more captured, but the force, while on its way to Abu, suffered a reverse at Dattāni*—losing its leader and several others of note—and was compelled to retire. Sūrthān immediately regained his capital.

* Tod gives a rather different account of this engagement. He says that Chandra Sen, son of Rao Māldeo, left three sons, the youngest of whom, Rai Singh, "fought a duel with Rao Sūrthān of Sirohi, and was slain with twenty-four of his chiefs." The duel, he explains, "was fought with a certain number on each side—Rāthors against Deoras (a branch of the Chauhāns), the two bravest of all the Rājput races."

According to the *Tabakāt-i-Abkari*, Itimād Khān was in command of the imperial troops and was ordered "to take away the country of Sirohi from Sarmān Deori, and give it to his brother Jagmāl, who was an adherent of the throne." Itimād Khān carried out the orders, but the reverse at Dattāni is not mentioned.

In or about 1596, Rājā Sūr Singh of Jodhpur was commanded by Akbar to "reduce the arrogant chief of Sirohi who, trusting to the natural strength of his mountainous country, still refused to acknowledge a liege lord. This service well accorded with Sūr Singh's private views, for he had a feud with Rao Sūrthān which, according to the chronicle*, he completely revenged." This appears to have humbled the Deora, who is said to have accepted the imperial *firmān* in token of submission, and agreed to serve with a contingent of his hardy clansmen in the war then entrusted to Sūr Singh against Gujarāt.

The last incident in the life of Sūrthān of which there is any record is his capture by Mukand Dās, a Rāthor of the Kūmpāwat sept. Tod says that it occurred in the time of Jaswant Singh of Jodhpur (1638-78), but a mistake appears to have been made as Sūrthān died in 1610 or, at the latest, 1622. The story runs that the Rao was conveyed first to Jodhpur and next to the court at Delhi where, "being led between the proper officers to the palace, he was instructed to perform that profound obeisance from which none were exempted;" but the haughty Deora replied that his life was in the king's hands, his honour in his own; he had never bowed the head to mortal man, and never would. "As the Jodhpur chief had pledged himself for his honourable treatment, the officers of the ceremonies endeavoured by stratagem to obtain a constrained obeisance and, instead of introducing him as usual, showed him a wicket, knee-high and very low overhead, by which to enter, but, putting *his* feet foremost, his head was the last part to appear. This stubborn ingenuity, his noble bearing, and his long-protracted resistance, added to the pledge given by the Jodhpur chief, won the king's favour; and he not only proffered him pardon, but whatever lands he might desire. Though the king did not name the return, Sūrthān was well aware of the terms, but he boldly and quickly replied 'what can your majesty bestow equal to Achalgarh? let me return to it is all I ask.' The king had the magnanimity to comply with his request; Sūrthān was allowed to retire to the castle of Abu, nor did he or any of the Deoras ever rank themselves among the vassals of the empire, but they have continued to the present† hour a life of almost savage independence."

Rao Rāj Singh. Rao Akhai Rāj II.

Rao Sūrthān was succeeded by his eldest son, Rāj Singh, who, after ruling for seven or eight years, was treacherously killed by his minister, Prithwī Rāj. The next chief was Akhai Rāj II, who avenged his father's death by slaying Prithwī Rāj, but the latter's son, Chānda, ravaged the country, seized Nībaj (in the south-west), and defeated a body of Sirohi troops sent against him. On Chānda's death, his son, Amar Singh, remained in outlawry for a time, and was then driven from the State. About this period,

* "He avenged his feud with Sūrthān and plundered Sirohi. The Rao had not a pallet left to sleep on, but was obliged to make a bed for his wives upon the earth."

† The quotation is from Tod's *Rājasthān*, Vol. II., published in 1832.

Rānā Jagat Singh I of Mewār is said to have led an army against Sirohi, but Akhai Rāj made peace with him. In 1663 the Rao was imprisoned by his son Udai Bhān, who seized the *gaddi* for a time, but, on Akhai Rāj being released at the intervention of Rānā Rāj Singh I, he retaliated by killing both his son and grandson; he died in 1673.

The next three chiefs were Udai Singh; Bairi Sāl I; and Dūrjan Singh. The first ruled for a very short time, the second for about twenty-three years, and the third died in 1705; the entire period appears to have been quite uneventful. Dūrjan Singh was succeeded by his son Mān Singh III *alias* Umed Singh I, who was Rao of Sirohi till 1749. Mahārājā Abhai Singh of Jodhpur had been appointed viceroy of Gujarāt in 1730 and ordered to subdue the rebellion of Sarbuland Khān there but, "instead of proceeding direct to the main object of the war, took advantage of his immense army to wreak his vengeance on his neighbour, the chief of Sirohi, who, trusting to his native strength, had spurned every compromise which involved his independence. This resolution he maintained by his natural position, strengthened by alliances with the aboriginal races who hemmed his little State on all sides, except that towards Mārwār." Abhai Singh's army advanced, captured several forts belonging to Sirohi, and had reached the capital, when Mān* Singh, in order to stop further fighting, offered his daughter in marriage to the Rāthor chief. "The cocoanut was accepted; the drum of battle ceased; the nuptials were solemnised, and in the tenth month Rām Singh was born at Jodhpur." Mān Singh also sent the Thākur of Pādīv and others to fight under Abhai Singh in Gujarāt, and the imperial army recommenced its march to Ahmadābād, where (in 1731) the Sirohi contingent served with distinction. Rao Mān Singh III.

The successors of Mān Singh were:—(i) Prithwī Rāj (1749—72); (ii) Takht Singh (1772—81); (iii) Jagat Singh (1781-82); and (iv) Bairi Sāl II (1782—1808). These were troublous times for Sirohi. Mahārājā Bijai Singh of Jodhpur is said to have annexed a good deal of territory from the Deoras, and Rao Bairi Sāl was unfortunate enough to incur the enmity of Mān Singh when the latter was besieged in the fort of Jālor by his cousin, Mahārājā Bhīm Singh; for when Mān Singh sent his wife and son (Chhatar Singh) for safety to a village in Sirohi, the Rao, from fear of offending Bhīm Singh, refused them shelter, and this was never forgiven. Accordingly, when Udai Bhān, the son and successor of Bairi Sāl, was returning from performing his father's funeral obsequies on the banks of the Ganges, he was seized by Mahārājā Mān Singh of Jodhpur and forced to pay a ransom of five lakhs of rupees. To liquidate this sum, Udai Bhān levied collections from his subjects, and so oppressed them that in 1816 he was deposed and imprisoned by a convocation of the nobles Rao Udai Bhān, 1808—16.

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* Tod writes that "Rao Nārāyan Dās" offered his "niece (daughter of Mān Singh his predecessor)" to Abhai Singh, but the Sirohi records contain no mention of any Rao of the name of Nārāyan Dās.

and people of the State, and his younger* brother Sheo Singh was selected to succeed him.

Raò Sheo Singh, 1816-62.

The condition of Sirohi was now critical; many of the *jāgīrdārs* had thrown off their allegiance and placed themselves under the protection of Pālanpur, and the State was nigh being dismembered. Mahārājā Mān Singh, aided by the Thākur of Nībaj, sent a force to liberate Udai Bhān who was confined on Abu, but the expedition failed, and in 1817 Sheo Singh sought the protection of the British Government. The Jodhpur State immediately claimed suzerainty over Sirohi but, after a very careful enquiry, in which Captain Tod, who was then Political Agent in Western Rājputāna, took a prominent part, this was disallowed, and a treaty was concluded in 1823. Tod gives† the following account of the negotiations and his connection therewith :—"Sirohi possessed peculiar claims to my regard, its political relations having been entirely under my management since the general pacification in 1817-18, and its independence, both political and social, having been preserved entirely through my exertions from the specious pretensions of her powerful neighbour, the Rājā of Mārwār, who claimed her as a tributary. These claims were so well supported by argument and documentary evidence as to obtain credence with the functionary who was then the medium of the political relations of Mārwār with the British Government, and they had nearly obtained the sanction of the Governor General. It was on this occasion, as on several others, that some historical knowledge of the complicated international politics of these regions enabled me to unravel the perplexities of the case, and save the lands of the Deoras from the relentless tribute-collectors of their powerful opponent. * * * * The envoys of Jodhpur advanced their right to tribute and service from the time of Rājā Abhai Singh, which claims I met with counterproofs from their own annals, showing that, although the quotas of Sirohi had served under the princes of Jodhpur, it was as viceroys of the empire, not as Rājās of Mārwār; and that in the wars of Gujarāt, where the Deora sword was second to none, it was under the imperial banner that they fought, with Abhai Singh as *generalissimo*."

Treaty with the British, 1823.

The treaty between the East India Company and Rao Sheo Singh, "regent of Sirohi and representative of the rulers of that principality," is dated the 11th September 1823. It bound the Rao, his heirs and successors, to acknowledge British supremacy, to abstain from political intercourse with other chiefs, to govern in accordance with the advice of the British Agent, to introduce an efficient administration, and pay a tribute not exceeding three-eighths of the annual revenues of the country. The British Government extended its protection to the State, guaranteed the succession to the heirs of Udai Bhān—should there be any such on the death of Sheo Singh—

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* Sheo Singh was the third son of Bairi Sāl; the latter's second son, Akhai Rāj, who was thus passed over, was accidently killed two years later by the bursting of a gun.

† See *Travels in Western India*, pages 60-64, London, 1839.

and reserved to itself the right to regulate transit-duties in Sirohi, and to interfere from time to time to enforce or amend the same. In the fifth article the territory was described as having "become a perfect desert in consequence of intestine divisions, the disorderly conduct of the evil-disposed portion of its inhabitants, and the incursions of predatory tribes;" a Political Officer (Captain Speirs) was accordingly appointed and, owing to the disorganised condition of the State, had at first to exercise an unusual interference in its internal affairs. A detachment of Bombay troops was employed for a short time to put down the Mīnās and other predatory bands, the Thākurs* were in a great measure reduced to submission, and a system of government was introduced. Shortly after Captain Speirs' deputation, Sheo Singh, considering himself aggrieved at certain suggested reforms, fled to Abu where he was joined by most of his principal *jāgīrdārs*—Prem Singh of Nībaj being the only one of note who held back—but the misunderstanding did not last long, and the Rao, recognising the error he had committed, returned to his capital at the end of 1825.

The objects for which a Political Officer had been stationed at Sirohi having been attained, he was recalled in the middle of 1832, and our relations with this small State were placed under the Nīmach Agency. The measure of withdrawing the Political Officer was distasteful to Sheo Singh, who petitioned hard not only to have an Agent permanently located at his capital but also a detachment of regular troops. A few years later, it was found that the State could not be properly supervised from Nīmach (where the Political Agent of Mewār resided), and the charge was transferred to Major Downing, Commandant of the Jodhpur Legion, which was cantoned at Erinpura. The presence of a British officer on the spot, supported by this body of troops, greatly conduced to the restoration of order, and the amelioration of Sirohi may be considered as dating from this time. The period was marked by frequent depredations committed by Mārwār subjects, occasional raids by Bhīls from the Mewār side, and the outlawry of refractory Thākurs—evils which have proved chronic in Sirohi up to fairly recent years, as the country, being wild, hilly, and difficult of access owing to the extent of thick jungle, has afforded a tempting refuge to the Bhīls, Girāsias, and Mīnās, always ready to flock round any discontented or lawless Thākur who would lead them to pillage.

In 1845 the Darbār made over to the British Government certain lands on Mount Abu for the establishment of a sanitarium; the grant was fettered by several conditions, one of which was that no kine should be killed. Two years later, Udai Bhān died, and Sheo Singh, whose position under the treaty of 1823 was that of regent only, was acknowledged as chief. In the settlement of the boundary between

*One of the most refractory of the nobles was the Thākur of Nibaj with whom an engagement was mediated by the Political Officer in May 1824, guaranteeing to him his lands on condition of feudal service and payment of three-eighths of his revenues to the Rao. Others of the Thākurs had transferred their allegiance to Pālanpur, and Sheo Singh claimed their restoration, but it was decided that all should remain under Pālanpur except the Thākurs of Mandār and Jilwāra, whose allegiance had not been transferred till after 1817.

Sirohi and Pālanpur in 1850-51, two villages belonging to Nāthu Singh, Thākur of Bhatāna, were awarded to Pālanpur, whereupon he went into outlawry, refusing other lands which were offered to him. The Sirohi State by itself was quite unable to cope with him, but in 1853, with the aid of the Jodhpur Legion, he and his band were so hard pressed that they surrendered. Nāthu Singh was sentenced to six years' imprisonment, but unfortunately escaped from jail in 1858, and became once more a source of trouble and anxiety to the Darbār. In 1854 Rao Sheo Singh, finding himself hampered by debt and unable to keep order, solicited and obtained from Government the services of a British officer to exercise a special superintendence over the affairs of his State; this arrangement was intended to last for eight years, but was subsequently extended to eleven, as the liquidation of the debts was considerably retarded by the Mutiny of 1857. During this period the expenditure was kept within certain limits, but, with this exception, the superintendency appears to have been confined to the settlement of such questions as threatened to disturb the peace of the country and to the introduction of such reforms as were urgently needed. In other respects, the chief was left practically unfettered, and but little interference was exercised in internal affairs; yet, even with this degree of supervision, trade and cultivation increased, and the condition of Sirohi was much improved. Affairs continued thus till 1861 when, in consequence of the incapacity of Sheo Singh, the general control was made over to his second son, Umed Singh (the eldest, Guman Singh, having died previously). The old Rao, however, retained the dignities and honours of office till his death on the 8th December 1862; he was regent for thirty-one, and chief for fifteen years, but can scarcely be considered a successful ruler as he was unsuited in character for the troublous times in which his lot was cast. He did good service in the Mutiny of 1857, in consideration of which he received a remission of half his tribute,* which had been fixed at Bhīlāri Rs. 15,000 or Government Rs. 13,762-8-0, and the privilege of adoption was guaranteed to him in 1862.

Rao Umed Singh, 1862–75.

Sheo Singh was succeeded by his son Umed Singh, who governed his State with the assistance of the Political Superintendent for about three years, and was invested with full authority on the 1st September 1865. He assumed power under fair auspices with a balance in his treasury and the general condition of affairs much improved from what it was in the time of his father, and had he been less apathetic and more careful in his expenditure, he might have done much for his people, but he lacked the energy so needful in a ruler of Sirohi, and being priest-ridden, easy-going and intensely conservative, soon let his State drift into debt and difficulties. In other respects he was a kind and well-meaning chief, free from vices, and peculiarly happy in his domestic relations.

The principal events of Umed Singh's time were the famine of 1868-69, the renewed outlawry of Thākur Nāthu Singh (mentioned)

*The tribute payable by the Darbār to Government is consequently Imperial Rs. 6,881-4-0 annually.

above), and the frequent incursions of the Bhīls from the Mārwār border. All the measures taken for Nāthu Singh's apprehension failed and, after a time, the British troops which had been sent to co-operate were withdrawn, and Sirohi was left alone to cope with the outlaw and his band—a task to which the wretched and ill-paid militia was quite unequal. The result was that the free booters became all the bolder, and the Bhils of the Jodhpur villages along the western frontier made constant raids, plundering in the name of Nāthu Singh. Affairs came to such a pass that the main road to Ahmadābād was almost impassable for travellers and merchandise, and, under these circumstances and in view of employing the Erinpura Irregular Force, the political charge of the State was transferred from an Assistant to the Governor General's Agent to the Commandant of the corps just mentioned. The latter, being vested with special powers, speedily brought the Bhīls to order and put down plundering with a strong hand. The outlaws were, however, never apprehended. Nāthu Singh died of fever in a Jodhpur village in November 1869, but his son (Bharat Singh) and the rest of the gang remained at large till 1871 when they were called in and settled.

Rao (afterwards Mahārao) Kesri Singh, 1875 to date.

Rao Umed Singh died on the 16th September 1875, and was succeeded by his only son, Kesri Singh, who was born on the 20th July 1857, was invested with full powers on the 24th November 1875, and is the present chief of Sirohi. He received the title of Mahārao as a hereditary distinction in January 1889, was created a K.C.S.I. in 1895, and a G.C.I.E. in 1901. His Highness has one surviving son, Mahārāj Kunwar Sarūp Singh, who was born on the 27th September 1888. Of the more important events of the last thirty years, the earliest was the outlawry of Sārdūl Singh, Thākur of Rewāra. This man, after committing numerous dacoities and robberies, had been captured and sentenced to twelve years' imprisonment in 1872, but was released on security three years later in consequence of his youth; he resumed his lawless habits in 1879, and distinguished himself by a cruel and brutal raid on the village of Kherāl, in the course of which he murdered the Thākur of that place. Sārdūl Singh remained at large till July 1882, when he was captured by a joint party of Jodhpur and Sirohi *sowārs* and, having been convicted of murder and dacoity, was sentenced to death, but, as he was a *jāgīrdār* of rank, he was shot and not hanged. Other events deserving of notice were:—(i) the agreement entered into with the Government of India in 1879, which related to the manufacture, export and import of salt, and was modified first in 1882 and next in 1884; (ii) the completion of the railway line between Ajmer and Ahmadābād in 1880; (iii) the abolition in 1886 of transit-dues on all articles except opium; (iv) the famine of 1899-1900 and the scarcity of 1901-02; and (v) the introduction of Imperial currency as the sole legal tender in 1904. A good deal has been done by His Highness to improve the condition of his State. Crime is less frequent, and the relations between the Darbār and the Thākurs are more cordial; the revenue has been doubled, but progress has been much retarded by recent unfavourable seasons.

The Mahāraos of Sirohi are entitled to a salute of fifteen guns.

Archæology. The places of special interest to the archæologist and historian are Abu including Achalgarh; the remains of the city of Chandrāvati near Abu Road; the sacred shrine of Saraneshwar, two miles north of Sirohi; and the old fort of Vasantgarh, south of Pindwāra. These are all described in Chapter VI below. The following places are also worth visiting, namely Ajhāri, Jhārol (or Jhādoli), Mīrpur, Nāndia, Rohera and Wāsa.

Ajhāri lies about two miles south of Pindwāra railway station, and possesses the remains of numerous old Hindu temples, some of which are built of bricks of an unusually large size. There is also a Jain temple to Mahāvīra which, as it is now, is comparatively modern, but the door-frames of some of the cells are carved and are certainly old. In one of the cells is a black marble image of Saraswatī, with an inscription dated 1212.

The village of Jhārol (between four and five miles to the north of Ajhāri) is noticeable for its Jain temple dedicated to Sāntināth, in the antechamber of which is a large slab with an inscription referring itself to the reign of the Paramāra king Dhārāvarsha and dated 1198—the earliest mention of this ruler that has yet been found. The interior is of no particular interest, but the pillars and arches resemble in style those of Vimala Sāh's temple on Abu. In one of the corridors is an inscription dated 1179, recording the installation of an image of Rakhabhnāth, which must doubtless have been in one of the attendant cells.

Near the village of Mīrpur, about nine miles south-west of Sirohi and surrounded on all sides by hills, is a Jain temple to Godināth which appears to belong to the fourteenth century. The entrance porch rests on pillars of somewhat fanciful design, while the ceiling of the hall is decorated with pendant ornaments and sixteen brackets which support as many small uncouth figures. Close by are three small modern shrines—also Jain—and one contains a few old images with inscriptions on them; three bear the date 1199 and two 1289, but they seem to have been brought from some other temple.

Nāndia, a village five miles west of Pindwāra station, has a well-preserved Jain temple of Mahāvīra, which is said to be more than nine hundred years old. The outer porch is small, plain and undecorated, and the interior is very similar to that of the shrine at Jhārol. Into the outside wall has been built an inscription-stone which is dated 1073 and tells of a step-well having been constructed near the doorway, but no trace of this well remains.

Rohera, four miles south of the railway station of the same name, contains three temples of some archæological interest, namely two outside and one in the village. Of the former, the first is that of Thākurjī which faces the east, is made up of old and modern masonry, and appears to have originally been dedicated to the sun. The exterior is plain, but the heavy massive mouldings indicate an early age. The hall contains figures of Siva, Pārbatī and Kalki (the last *avatār* or incarnation of Vishnu), while within the shrine are modern

images of Rāma, Sita and Lakshmana. The second temple lies to the south-east of Rohera, and is dedicated to Rājeshwar Mahādeo; parts of it are certainly old. The spire is of the Gujarāt type, but is built of bricks coated with plaster, upon which the whole of the surface carving has been carried out. The domical roof is of comparatively recent date, and rests upon short pillars of the pot and foliage style and arranged octagonally; one of the niches in the hall has a sculpture of *Sesh Shayya Nārāyana*, or Vishnu reposing on a snake which is floating in the water. The shrine, the carved door of which has suffered greatly from the weather, contains a *lingam* which is daily worshipped. The third temple is in the centre of the village, and is called Lakshmī Nārāyan-kā-mandir; it stands in a court, faces the east, and its hall and porch are undoubtedly built of old materials. Inside the hall, on a pedestal facing the sanctum, is a modern figure of the eagle (*garud*) or vehicle of Vishnu; the shrine itself has a conjoint image of Vishnu and Lakshmī.

Rather more than a mile to the north-east of Rohera is the village of Wāsa, on the outskirt of which is a fine temple to Sūrya (the sun-god) of the eleventh or twelfth century. The village itself has a curious temple with a *lingam* in the shrine and the image of a *tīrthankar* above the door thereof; it seems that there was a feud between the Brāhmans and Jains as to which form of religion should prevail, and that the former won the day, the building being sacred to Mahādeo. For a fuller account of the objects of antiquarian interest the reader is referred to the *Progress report of the Archæological Survey of India, Western Circle*, for the months July 1905 to March 1906, inclusive.

CHAPTER III.

THE PEOPLE.

Population in 1881, 1891 and 1901.

The census of 1901 was the third of a decennial series which commenced in 1881, and the population * at each of these enumerations was:—142,903 in *1881*; 190,836 in *1891*; and 154,544 in *1901*. It should, however, be mentioned that both in 1881 and in 1891 the Girāsias of the Bhākar, a wild tract in the south-east, objected to being counted; in the first of the above years they were omitted altogether, while in 1891 their number was roughly estimated at 2,860, which figure has been included in the total of 190,836.

During the first of these decades, the population increased by more than thirty-three per cent. (as compared with nearly twenty-one per cent. for the Province of Rājputāna and about nine per cent. for India as a whole), and this was ascribed to the opening up of the country by the Rājputāna-Mālwā Railway and to a series of generally favourable seasons, which resulted in the founding of thirty new villages.

In the course of the next ten years the State lost more than 36,000 persons, or, in other words, the population decreased by rather more than nineteen per cent.; this was due chiefly to the famine of 1899-1900, which was accompanied by an epidemic of cholera and followed by a severe outbreak of malarial fever, and perhaps also to some extent to improved methods of enumeration. The decrease among males and females was about the same, namely 18·62 per cent. among the former and 19·45 among the latter. Taking the population by religion, we find that the Hindus and Animists († combined) lost more than twenty-one, and the Jains about seven per cent., while the Musalmāns and Christians increased by over fourteen and nearly twenty-four per cent. respectively. Turning now to administrative divisions, a reference to Table No. XLIV in Vol. III-B will show that the Rohera *tahsīl* in the south-east and the Anādra *tahsīl* in the south and south-west suffered most heavily, and that Kharāri or Abu Road (an important railway centre), Abu (including the small villages scattered about the hill), the little town of Sheoganj and the cantonment of Erinpura alone increased in population.

Density.

The number of persons per square mile was approximately seventy-three in 1881, ninety-seven in 1891, and seventy-nine in 1901; the sparseness of the population is due to the hilly nature of the greater part of the country.

Towns and villages.

At the last census, the State was made up of five towns and 408 villages. The total number of occupied houses was 39,624, and the

* For further details see Table No. XLIII in Vol. III-B.

† Separate figures not available. In 1891 the Animists (Bhils and Girāsias) were all classed as Hindus.

average number of persons per house was 3·90. The towns contained 23,367 inhabitants (or rather more than fifteen per cent. of the entire population), who were residing in 5,969 houses; these figures give an average of 1,194 houses per town and 3·91 persons per house. None of the towns are of any size, the largest being Abu Road or Kharāri with 6,661, and Sirohi with 5,651 inhabitants; the remaining three were Sheoganj (4,361); Abu, including the bazar, the civil station and the sanitarium (3,488); and the cantonment of Erinpura (3,206). Of the villages, only seven had a population exceeding 2,000; on the average a village contained about 321 persons and eighty-two houses. In the Bhākar and some other hilly parts, the hamlets resemble those found in the south and south-west of Mewār, *i.e.* they consist of congregations of detached huts which sometimes cover an immense area; the Bhīls and Girāsias usually build their huts on separate hillocks at a considerable distance from each other but close to their fields, and so situated as to allow of a ready escape to the woods in cases of emergency. Elsewhere, the villages are of the ordinary compact type with the best houses in the centre and those of the lower castes grouped round them.

Migration.

The population has to some extent been swelled by immigration. The census returns show that, of 154,544 persons enumerated in 1901, more than eighty-six per cent. were born in the State, and nearly nine per cent. in some other part of Rājputāna (chiefly Jodhpur), while the majority of the remainder came from the Bombay Presidency (mostly Fālanpur and Ahmadābād) and the United Provinces. In the interchange of population with the Native States of Rājputāna—which is largely due to marriages, as disclosed by the preponderance of females—Sirohi secured a net gain of more than 12,000 persons, having received 13,641 (of whom 7,786 were females) and given in return only 1,619 (including 1,022 females), almost all of whom (*i.e.* 1,404) went to Jodhpur. Similarly, from outside Rājputāna, Sirohi received 7,460 persons and gave only 3,090, and this excess of immigrants over emigrants was mainly due (*i*) to the existence of the railway, which has attracted many foreigners to Abu Road and other stations; (*ii*) to the presence of the 43rd Regiment at Erinpura; and (*iii*) to the fact that Mount Abu is the headquarters of the Governor General's Agent and a sanitarium for British troops.

Vital statistics.

The registration of births and deaths was started in 1893 both at the capital and at six of the larger towns and villages, namely Abu Road, Kālandri, Mandār, Pindwāra, Rohera, and Sheoganj, but the statistics are not very reliable, and we need consider only those which relate to the capital. During the eight years ending 1900, when the town may be assumed to have contained 6,207 inhabitants, the annual average number of registered births was 75, and of deaths 150, or ratios of twelve and twenty-four per mille respectively. In 1900 (a year of famine) only 62 births were reported, and in 1893 as many as 124; similarly 89 deaths are said to have occurred in 1898 and 490 in 1900. The population of the capital had by 1901 fallen to 5,651, and during the five years ending 1905 the annual

average number of births was 73, and of deaths 75, each figure representing a rate of about thirteen per mille. The actual figures for 1906 were:—births 45 and deaths 81.

Diseases.

As regards diseases, malarial fevers are most prevalent, especially at the close of the rains and in the early part of the cold season; the wooded tracts round the base of Abu are particularly malarious, but there is no known fever of an intense type answering to the jungle fever of the Tarai. Dysentery and diarrhœa are not uncommon between September and November, and among other ailments may be mentioned pneumonia, rheumatism, guinea-worm, enlargement of the spleen, ulcers and abscesses. Smallpox is now rare, but cholera epidemics occur from time to time, the germs being often imported by pilgrims bound for the Delwāra temples. In his book, *The Western Rājputāna States*, (published in 1899) Lieutenant Colonel Adams, I.M.S., wrote thus:—" Epidemic cholera has never been known on Mount Abu, and there is only one imported case on record on the hill;" it is a melancholy fact that in the very next year this distinguished officer, who had served for twenty-one years in Rājputāna and gained the esteem and affection of all classes, contracted this fell disease in the course of his official duties and succumbed at Abu on the 20th May 1900.

Plague.

The State was free from plague till the end of 1896, when four imported cases were discovered at Abu Road, and all ended fatally. The villagers were warned against communicating with Pālanpur (where the disease was prevalent), and a guard was placed on the main road leading into that State; the pilgrim traffic between Abu and Kharāri was completely stopped, and a quarantine of ten days was imposed on people coming to Abu from infected districts. In November 1897 a wealthy Baniā, having successfully evaded detection on his way from Poona, arrived at the village of Teori and died there of plague on the following day. His funeral was well attended, and an outbreak of the disease promptly followed which in a short time spread to five villages. Every precaution was taken to arrest its progress, the villages being vacated, the houses disinfected, and the sick carefully segregated; nevertheless the epidemic was not stamped out till the hot weather had well set in, and altogether 166 indigenous cases and 143 deaths occurred during the five months. Since then plague has reappeared off and on, and there was a rather severe outbreak at Rohera in 1905. Including cases among railway passengers, there have been 493 seizures and 382 deaths up to the end of March 1907.

Infirmities.

The number of afflicted persons, excluding deaf-mutes,* fell from 1,294 in *1891* (1,162 blind, 85 insane and 47 lepers) to 161 in *1901* (156 blind, four insane and one leper). This enormous decrease of more than eighty-seven per cent. was probably due in part to the famine of 1899-1900 and in part to more careful enumeration, though

* They were not enumerated in 1891, but there were sixty-one at the last census.

the diminution in the number of the blind may perhaps be ascribed to some extent to the spread of vaccination and the greater readiness of the people to resort to hospitals.

Sex and age.

The proportion of females to 1,000 males rose from 877 in *1881* to 907 in *1891*, and then fell to 898 in *1901*. At the last census, more than fifty-two per cent. of the inhabitants were males, and the returns show that females were in a minority everywhere except in the towns of Sheoganj and Sirohi. Taking the population by religion, we find that in 1901 the percentage of females to males was 76·6 among Musalmāns, 87·4 among Hindus, 89·7 among Animists, and 114·5 among Jains; the last figure is believed to be due, not to polygamy, but to the fact that some of the well-to-do bankers and traders who profess Jainism are in the habit of visiting other parts of India in connection with their business and, while on these journeys, are usually unaccompanied by their wives. The age statistics of an Indian census are always the least reliable; those for Sirohi show the Jains to live longest, more than four per cent. of them having returned their age as sixty or over, the similar figures for Musalmāns, Hindus and Animists were 3·4, 3·1, and 1·3 respectively. Again the women appear to be longer lived than the men as, of 4,703 persons who gave their age as sixty or more, 58·2 per cent. were females; on the other hand, exaggeration in the matter of age is very common, especially among old women. Though there were more boys than girls under five years of age, there is no reason to believe that female infanticide is now practised.

Civil condition.

At the last census, more than forty-two per cent. of the people were returned as unmarried, more than forty-three as married, and nearly fourteen per cent. as widowed. Of the males, about fifty-one, and of the females thirty-three per cent. were single; there were altogether 995 married females to 1,000 married males, and 2,407 widows to 1,000 widowers—indeed, more than one-fifth of the women in the State were widows. The relatively low proportion of spinsters and the high proportion of widows are the results of the custom which encourages the early marriage of girls and disapproves of the remarriage of widows. Taking the population by religions, it is found that, among the males, forty-nine per cent. of the Hindus and Jains, forty-eight of the Animists, and more than fifty-four per cent. of the Musalmāns were married or widowed, while for females the similar percentages were: Animists 62, Musalmāns 64, and Hindus and Jains about 67. Early marriage prevails to some extent, but does not usually mark the commencement of conjugal life. Of children under fifteen years of age, more than seven per cent. (3·8 per cent. of the boys and 11·7 of the girls) were married or widowed; these early marriages are most common among the Hindus, and least so among the Jains. Polygamy is on the whole rare, but the Bhīl not infrequently has two wives; divorce is permitted by Muhammadan law and among the Bhīls, the lower castes of the Hindus and some of the Rājputs of inferior status, but is seldom resorted to while polyandry is quite unknown.

Language.

The language spoken by more than ninety-one per cent. of the people is Mārwārī, the most important of the four main groups of Rājasthānī, and another three per cent. speak Urdu. Other dialects heard here are Hindī, Gujarātī, and Bhīlī. Of the 1,388 persons enumerated in Rājputāna, who returned English as their mother-tongue, thirty-seven per cent. were found in Sirohi, chiefly at Abu and Abu Road, where there are comparatively large communities of Europeans and Eurasians.

Castes and tribes.

Of castes and tribes met with in the State, the following were most numerous at the last census:—Mahājans (18,908); Rājputs (13,356); Dheds (11,375); Rebāris (11,374); Bhīls (10,372); Kumhārs (8,202); and Girāsias (7,754).

Mahājans.

The Mahājans or Baniās formed more than twelve per cent. of the population; they belong mostly to the Oswāl and Porwāl subdivisions, and are traders and money-lenders by occupation. No very wealthy mem bers of this caste are found in Sirohi.

Rājputs.

Included among the Rājputs are twenty-two Musalmāns; the rest were chiefly Chauhāns (the Deora sept predominating) or Rāthors, with probably a few Sesodias, but the actual strength of each clan in 1901 is not given in the Census Report. The majority of the Rājputs are cultivators and as such, are neither skilful nor industrious; they belong to the *Dewāli band*, that is to say, they are the protectors of their village, and pay land revenue at reduced rates. Others hold estates on the *jāgīr* tenure, and a few serve in the police force.

Dheds.

The Dheds, a very low caste, are found in every *tahsīl* except the Bhākar, but are most numerous in the north; they remove all the dead animals of the village and perform menial duties. They also tan leather, and are reported to be generally fair cultivators.

Rebāris.

The Rebāris are mostly shepherds, and some of them possess flocks and herds of their own; many are agriculturists. They eat flesh, drink wine, and allow widow remarriage.

Bhīls.

The Bhīls formed nearly seven per cent. of the total population, and are one of the aboriginal races of this part of India. A general account of the tribe has been given in Part V of Vol. II-A of this series. Naturally idle and thriftless, they have never settled down to agriculture as they dislike the steady hard work of irrigating the fields, but they cultivate rain crops as this entails but little labour, and eke out their living by acting as guides and by occasional plundering when opportunity offers. They are very partial to *wālar* cultivation, cutting and burning the jungle in the dry hot weather and sowing the seeds of *māl (Eleusine coracana)*, *sāma (Panicum frumentaceum)*, and other inferior millets in the ashes; this mode of agriculture has proved most destructive to the forests, and has now been prohibited throughout the territory. The Bhīls may be divided into two classes, namely those who, in common with other castes, reside in villages, and those who live in hamlets and communities formed of their own people and governed by leaders of their own tribe. The former are to be met with all over the State, while the latter are found only in the south-east adjoining the rugged region

known to British political administration as the Hilly Tracts of Mewār.

Girāsias. Allied to the Bhīls, but ranking just above them in the social scale, are the Girāsias, the principal inhabitants of the Bhākar and also numerous in the Sāntpur and Pindwāra *tahsīls*. According to Sir John Malcolm, the term "Girāsias" denotes "chiefs who were driven from their possessions by invaders, and established and maintained a claim to a share of the revenue upon the ground of their power to disturb or prevent its collection." The word is derived from the Sanskrit *girās* which signifies a mouthful, and "has been metaphorically applied to designate the small share of the produce of a country which these plunderers claim." The Girāsias are said to have come from Mewār many centuries ago, and, as they still have their internal *gots* or circles of affinity (such as Paramāra, Chauhān, Rāthor, etc.), upon the model of a regular clan, we may perhaps assume that they are the descendants of Rājputs by Bhil women. It is probable that the Deora Chauhāns, when they subjected the Paramāras about six hundred years ago, were unwilling to dispossess the Girāsias of their land, or were possibly unable to do so on account of their secure position among the mountain fastnesses of the Arāvallis. Up to about 1867 little, if anything, was known of the Bhākar or its inhabitants; the latter were said to be jealous of intrusion, and wonderful tales were told of their strength, lawlessness, etc. No Rāj official ever ventured inside the tract, and the people paid no dues, revenue or tribute. In time, however, the Girāsias spread westwards, and their huts are to be found among the remains which mark the site of the famous but now almost forgotten city of Chandrāvati, the former mart of western trade. Remaining but two or three years in one place, they were the rude pioneers of civilisation, clearing the wilder and more unhealthy regions of wood and forest, bringing the land into use, and preparing it for the occupation at a later date of the more advanced races. At the present time they are cultivators, herdsmen and guides, and, though formerly great plunderers, seldom give any trouble; their dwellings are scattered about on the slopes of hills, over which and in the richer valleys their irregular fields extend. They still retain their *bhūm* rights, holding land free of rent or at reduced rates on condition of some particular service, such as watch and ward of their villages, etc. As agriculturists, they are on a par with the Bhīls and, like the latter, used to practise the *wālar* system of cultivation; they respect the cow and never take the life of any animal with a white coat, but will eat the flesh of a black sheep or goat.

Religions. At the last census, 72·7 per cent. of the people were Hindus, 11·7 Animists, 11·1 Jains, and 3·8 Musalmāns; Christians numbered 624, Pārsīs 140, Sikhs 100, and the Brahmos and Jews had one representative each. The various sects of the Hindus were not recorded, but Saivas, or those who regard Siva as supreme, are said to be the most numerous; the tutelary deity of the Deoras is Saraneshwar, a form of Siva, and nearly all the Vaishnavas of the State believe in the god.

The Animists were either Bhīls or Girāsias, whose religion may be said to be a mixture of Animism and Hinduism; they and the Mīnās pay special reference to Devī and Mātājī. The Chauhān warrior-saint, Gogājī, the accounts of whom vary considerably in different parts of Rājputāna, is much respected as a protector from the bites of snakes, and his effigy on horseback or in the form of a cobra is worshipped by many classes. Of the 17,226 Jains, practically all belonged to to the Swetāmbara division, there having been only sixty-two Digambaras and three Dhūndias; similarly more than nine-tenths of the Musalmāns were Sunnīs and the rest Shiahs.

Christians.

The Christian community has increased from 179 in *1881* to 504 in *1891* and 624 in *1901*; the last figure was made up of 346 Europeans, 162 Eurasians, and 116 Natives, all of whom, except six, were enumerated either at Abu, Abu Road, or Erinpura. Of the Native Christians, eighty-one were Roman Catholics, eleven belonged to the Church of England, one was a Baptist, and the remainder did not return their denomination. The State is included in the Anglican diocese, and the Roman Catholic archdiocese, of Bombay, but there are no Christian Missions here. The Chaplain of Abu periodically visits Abu Road, Deesa (in the Bombay Presidency) and Erinpura, at all of which places there are English churches, while the Roman Catholic priest resides at Abu Road and is also in charge of Abu and Deesa.

Occupations.

At the last census, more than thirty-two per cent. of the people returned some form of agriculture as their principal means of subsistence; thus, about 28·7 per cent. were either landlords or tenants, and 3·54 field-labourers. In addition, 1,636 persons (or another one per cent.), who mentioned some other employment as the chief source of their livelihood, were also partially agriculturists; and a further 22·4 per cent., shown under the head of general labourers, were perhaps to some extent supported by work in the fields. The industrial population amounted to 14·13 per cent., and was engaged chiefly in the provision of food and drink, and in the cotton and leather industries. The commercial classes, such as bankers, money-lenders, general merchants and shopkeepers, formed 13·72 per cent.—a figure much higher than was recorded in any other State in Rājputāna—and the professional classes only 1·18 per cent. Persons returned as having no occupation numbered about 6,400, or over four per cent., and included those of independent means, pensioners, prisoners and beggars, chiefly the last.

Food.

Wheat, barley, gram, *mūng*, *jowār* and maize are more common in Sirohi as food-stuffs than *bājra* and *moth*, though the latter are grown and consumed in some parts. Rājputs and Muhammadans eat flesh, as also do the Bhīls, Girāsias, and the lower Hindu castes when they can afford it. Vegetables and fruits are fairly plentiful, and milk, *ghī* and tobacco are in general use. A good deal of country liquor is drunk, especially by Rājputs, Mīnās and Bhīls, and opium is taken both as a beverage on great occasions and by *habitués* of the drug; very few people indulge in *gānja* or *bhang*.

Dress.

In the matter of dress there are no marked peculiarities. The Rājputs wear the usual tunic with long sleeves open at the wrist and a moderate sized turban called *pāg*, while the Bhīls, Mīnās and lower classes are, as a rule, poorly clad and wear a smaller turban (*potiā*). The clothes of the majority of the people are made of the coarse cotton cloth (*rezā*) woven in their villages, but the aristocracy and traders who have business connections outside the State use imported fabrics. The inhabitants not infrequently go about armed; the Bhīls and Mīnās still carry bows and arrows, and the latter have a *katār* or dagger in addition.

Dwellings.

The houses of the masses are usually made of mud with roofs of rough tiles, while those of the better class are of burnt bricks with either paved or tiled roofs. The furniture is ordinarily cheap and simple, comprising a few tape-bound wooden cots, mattresses, boxes, stools, and the indispensable cooking pots; the poorest people are content with a mattress and two or three earthen jars. In the Bhākar and other wild parts, the dwellings of the Girāsias consist of a framework of wood, the walls being split bamboos and grass and the roofs of broad flat tiles; a few stone houses are to be seen, but they are not generally in favour with the tribe. The abodes of the Girāsias are almost always built on the same plan, and consist of an outer and inner room of equal length; the former is rather narrow and is the place in which cooking, etc., is carried on, while the latter is generally raised a step, and contains the year's supply of grain, stored in hard mud jars of various sizes, some upwards of six feet in height. The larger towns and villages possess a few *pakkā* houses of two or more storeys, but the rooms are, as a rule, so low and so shut in on all sides that sanitation is an almost insoluble problem.

Disposal of dead.

The Hindus mostly cremate their dead, but some of the ascetics, such as the Sanyāsis and Gosains, are buried. The Musalmāns always practise inhumation, and the Bhīls bury boys and virgins, as well as the first victim of an outbreak of smallpox.

Amusements.

The amusements are singularly few. Some of the Rājputs take horse exercise and go in for shooting (almost entirely with the rifle), while the Bhīls, Girāsias and Mīnās kill deer and hares for the sake of their flesh. The younger generation have their games resembling blindman's buff (*ānkh chhipāni*), hockey (*bāthal kūnda*), tip-cat (*gallī dandā*), hide-and-seek, prisoners' base, and others locally called *lattu-kā-khel* (played with sticks) and *tāngri-kā-khel* (in which the competitors have to hop). For the adult rural population there are few relaxations, and the monotony of their daily life is varied only by an occasional marriage or funeral or caste feast, or the celebration of one of the annual festivals.

Festivals.

The festivals observed in Sirohi are those common to Rājputāna, namely the Vasant Panchamī, or celebration of the commencement of spring, in February; the Holī, or Saturnalia of India, in February or March; the Rākhi in July or August, when *rākhis* or bracelets of silk and tinsel are bound on as charms to avert evil; the Naurātra in honour of the goddess Devī in September or October, when horses,

elephants and all the implements of war are worshipped by Rājputs; the Dasahra at about the same time in commemoration of Rāma's victory over Rāvana, when the chief, after holding a *darbār* in the morning, proceeds in State to worship the *nīlkanth* or blue jay—a very auspicious bird—and in the afternoon pays a visit to the Saraneshwar temple; and the Dewāli or festival of lamps, twenty days later. The *sālgirah* or birthday of the ruler of Sirohi--in the present case Sāwan *badī* 14th, *i.e.*, in July or August—is also the occasion for a *darbār*, when a knot is tied in the chief's string of life, and presents of sweetmeats, etc., are made to the State officials and others.

Nomenclature.

Hindu males of the higher castes always have two names, the second of which usually indicates the division—whether Brāhman, Kshattriya, or Vaisya—to which they belong; indeed, the Kshattriya's name almost invariably ends in Singh. The first name may be that of a god or goddess, or a river or jewel or ferocious animal; or it may be taken from the day of the week on which the person was born, or from the date of the month, or the month itself. Sometimes a man's caste or *gotra* is prefixed, such as Singhī Punam Chand or Mehta Magan Lāl, or, in the case of a Rājput, his clan, such as Bhāti Jawāhir Singh. The Sūdras, on the other hand, generally have only one name, a diminutive of that of a higher class, *e. g.* Hīra, Kāla, Rāma, etc. In the names of places the most common suffixes are:—*pur*, -*pura*,-*wāra*, and-*gaon*, all meaning town, village or habitation; and -*garh*, meaning a fort.

CHAPTER IV.

ECONOMIC.

As observed in Chapter I, much of the country is rocky and hilly, and the culturable area is consequently somewhat limited; the soil is on the whole excellent, and water is almost everywhere to be found near the surface, but the population is not only sparse but includes many Bhīls, Girāsias, Mīnās and other lazy and unskilful agriculturists, and the result is that the greater portion of the State remains a wild jungle. The eastern valley bordering the Arāvallis is the most fertile part of Sirohi; the soil is a stiff black loam, rich with the remains of decayed plants; it retains moisture well, and yields both spring and autumn crops. Immediately to the west of the Abu-Sirohi range, the earth is brown or light yellow in colour and is well suited for autumn crops provided the rains are favourable; the soil of Abu itself is for the most part a stiff clay formed from crumbled felspar. In the plains to the west, there are two varieties, namely a yellowish grey which is fairly fertile, and a light sandy soil on which only one crop a year is grown; the latter is most common in the south-west and the extreme north. AGRICULTURE. General conditions.

The principal kinds of soil, as distinguished by the Sirohi cultivators, are:—(i) *mār* or *mattiyār*, stiff and black, in which wheat, barley, cotton, etc., are principally grown; (ii) *gorat* or *gorādu*, sometimes called *bhūri*, which is light brown in colour and rather sandy, but fertile; (iii) *reti* or nearly pure sand; (iv) *kānkri* or *kānkriwāli*, hard and stony with an admixture of sand, and found around the bases of some of the hills; and (v) *khāri*, or land impregnated with salts and in which nothing will grow. Another classification of the soils, depending on the distance from the village site, is also recognised, the manured home lands (*singam*) being distinguished from the outlying fields (*rānkar*). Soil classification.

The system of cultivation is of the rudest kind, and all the implements are of primitive design and simple character. For the rain crops the bush jungle is partially cleared, the ground is scratched with the plough, and the seed is sown broadcast. In the case of the inferior millets, the land is ploughed only once, but for maize two or more ploughings are considered necessary, and care is taken to uproot weeds and generally prepare the field. No manure is applied as, owing to the extent of waste, fresh ground is often broken up every year. For the cold weather crops more trouble is taken. The field is first ploughed at the close of the rains, and twice or thrice afterwards; the seed is then sown either by means of a drill attached to the plough or broadcast. Manure is used every second or third year, and there is no rotation of crops, the same land being sown with wheat or barley year after year. The peculiar System of cultivation.

system of cultivation known as *wālar* or *wālra*, and practised by the Bhīls and other wild tribes on the slopes of wooded hills, has already been mentioned (pages 230 and 254 *supra*); it is similar to the *jhūm* of Assam and the *kūmri* of the Western Ghāts.

The methods of agriculture on Abu are similar to those in the plains; where wheat and barley are grown, the land is heavily manured except in some of the valleys and on plateaux where there is a certain amount of level ground. As in other mountainous regions, the fields are usually formed by terracing the slopes of the hills and, owing to scarcity of suitable ground, the soil seldom has rest; but with plenty of manure and water very good crops are obtained.

Agricultural population.

Nearly 58,000 persons, or 37·37 per cent. of the population were returned in 1901 as dependent on pasture and agriculture, and the actual workers included in these groups numbered about twenty-four per cent. of the male population of the State and more than nine per cent. of the female. In addition, 1,636 persons recorded agriculture as a subsidiary occupation, and many of the general labourers are believed to have been cultivators as well. The principal cultivating classes are the Pātels and Mālis, both of whom are expert and industrious; the Rebāris, Dheds, Mīnās and Sargaras are described as fair husbandmen, the Rājputs as indifferent, and the Bhīls and Girāsias as bad. Besides the above, Brāhmans, Kumhārs and others are to be found almost everywhere practising agriculture in conjunction with their own peculiar trade or calling.

Agricultural statistics.

Unfortunately no reliable agricultural statistics are available, even for the *khālsa* lands or those paying revenue direct to the State. The fact is that the greater portion of the revenue is paid in kind, the Darbār taking a share of the actual produce, and no attempt is made to measure the land under cultivation except in villages where the *bīghotī* system (or cash rate per *bīgha*) is in force; it is consequently impossible to give for any single year either the area cultivated during the rains and cold weather respectively or the area under any of the principal crops. In 1867 the Political Superintendent, after touring throughout the territory, thought that not more than one-fortieth of the State was under cultivation, while thirteen years later it was reported that fully nine-tenths of the land were still uncultivated. The Darbār roughly estimates that at the present time the area cultivated in an ordinary year is 348 square miles, or rather more than one-sixth of the entire area of the State, and that, of the above, 123 square miles are *khālsa*; further, it gives the areas cultivated in the rains and cold weather as 301 and 47 square miles respectively; and it adds that these figures are considerably less than the averages prior to the famine of 1899-1900.

The two crop-growing seasons.

The two main crop-growing seasons are the *kharīf* or *barsāli* and the *rabi* or *unāli*; the *kharīf* (autumn) crops are sown with the first appreciable fall of rain, and are reaped in September and October, while the *rabi* (spring) crops are sown in October and November and ripen in March.

The principal *kharīf* crops are maize or Indian corn (*Zea mays*); *bājra* or spiked millet (*Pennisetum typhoideum*), grown in the sandy soil chiefly in the north and west; and such pulses as *mūng* (*Phaseolus mungo*), *moth* (*P. aconitifolius*), *urd* (*P. radiatus*), *khulāt* (*Dolichos biflorus*), and *gowār* (*Cyanopsis psoralioides*). Of the above, *khulāt* is much used as food mixed with wheat, while *gowār*, when ripe, serves only as fodder for cattle, but its green pods are prized as a vegetable. *Jowār* (*Andropogon sorghum* or *S. vulgare*) is hardly grown at all as the birds are said to damage it; as fodder, it is raised after the rains and cut green. The minor millets include *māl* (*Eleusine coracana*), *sāma* (*Panicum frumentaceum*), *kuri* (*P. miliaceum*), *kodra* (*Paspalum scrobiculatum*), and *barti* (*Setaria glauca*); oil-seeds are represented by a single variety, *til* or sesame (*Sesamum indicum*). Cotton is cultivated in some of the northern *tahsīls* and in Pindwāra, and *san* or Bombay hemp (*Crotolaria juncea*) and *ambāri* or roselle hemp (*Hibiscus cannabinus*) are both grown in small quantities for local consumption. *Kharif* crops.

The most important *rabi* crops are wheat and barley, the staple food grains of the upper classes; the area under wheat in an ordinary year is said by the Darbār to be about 9,000 acres or fourteen square miles. Gram (*Cicer arietinum*) is grown sparingly, and the only oil-seed is *sarson* or mustard (*Brassica campestris*); tobacco is found in some villages but it is of a coarse kind. Sugar-cane is cultivated to a very small extent in the Pindwāra *tahsīl*, and has a season of its own, occupying the land for about ten months; it requires a good deal of manure and constant irrigation. *Rabi* crops.

At Abu, Erinpura and Sirohi, English vegetables are obtainable during the cold months in abundance, and a very limited supply can be procured at other season of the year. Potatoes are grown for the market during the rains on Abu, and in the cold weather at a few other places; they are generally of fair quality, though not equal to the Himalayan tuber. Lettuces, turnips, carrots, cauliflowers, parsnips, cabbages, tomatoes, cucumbers, celery, spinach, peas, two species of artichoke, and beans of several sorts can be cultivated throughout the cold weather wherever there is fresh water, as the soil is generally suitable and the climate of the plains sufficiently cool between October and April. Many of the country vegetables are useful in the kitchen, as they flourish when English plants wither away on account of the heat. Leeks, onions, and two varieties of radish are in common use, and they grow even where the water is brackish. The following are some of the favourite vegetables of the people:—*brinjāl* or egg-plant (*Solanum melongena*); yam (*Dioscorea sativa*); sweet potato (*Ipomœa batatas*); chilly (*Capsicum annuum*); and a variety of the gourd and cucumber family. Excellent mushrooms are found on Abu and some other hills after the first showers of the monsoon have penetrated into the soil and moistened it, but they disappear as soon as the heavy rains have set in; the Abu variety is small and easily distinguished from the poisonous cryptogamic fungi by its smell, light Vegetables.

salmon-pink colour underneath, and the readiness with which the rind peels off.

Fruits.

Fruit-bearing trees are numerous, and include the *ām* or mango; the *amrūd* or guava of both white and red kinds; the *ber* or plum; the *jāmun* (*Eugenia jambolana*); the *khajūr* or date-palm; the *mahuā* (*Bassia latifolia*); the mulberry; the pomegranate; the pummelo; besides orange, lime and several varieties of figs. Grapes, strawberries, peaches and cape gooseberries are cultivated at Abu and a few other places, and melons are grown in the beds of rivers and streams. Bushes of *karanda* (*Carissa carandas*) abound on Abu, and the fruit is exported in large quantities to the plains below.

Loans to agriculturists.

The monopoly of supplying money to the cultivator is, as a rule, in the hands of the *bohrā* or professional money-lender (usually a Mahājan), who charges interest at the rate of twelve (or more) per cent. per annum. In large transactions a deduction called *khada* is made, by which the borrower receives from two to four per cent. less than the amount mentioned in the bond, but pays interest on the entire sum; moreover, all his property is set down as mortgaged to the *bohrā*, who thus becomes his capitalist, supplying him with seed, bullocks and the necessaries of life, and recouping himself by appropriating the greater portion of the produce of both harvests. In adverse seasons the Darbār assists the agriculturists with loans of money or grain and gifts of bullocks; for example, about Rs. 15,000 in cash appear to have been advanced in 1899-1900, in addition to bullocks worth Rs. 30,000.

Live stock.

Cattle are bred in considerable numbers, but are not possessed of any special qualities. The Rebāris keep large herds of camels, cows, sheep, goats and buffaloes, and the villagers of Abu find a good market for milk and *ghī*. In 1907 the State is said to have possessed nearly 31,500 bullocks, 29,000 cows, more than 18,000 buffaloes, 1,600 horses (including colts and fillies), and about 169,000 sheep and goats. The average prices of the various animals are reported to be:—sheep Rs. 4; goat Rs. 5; cow Rs. 30; bullock Rs. 50; male buffalo Rs. 25; female buffalo Rs. 50; pony Rs. 50; and camel Rs. 60. So much of the land still remains uncultivated that the grazing-grounds are very extensive and, in ordinary years, more than sufficient for requirements.

Irrigation.

The subject of irrigation has for some time been engaging the attention of the Darbār, and large sums have been spent during the last few years in the construction of certain tanks, but the latter have not been altogether a success, and it would seem that the subsoil of Sirohi is on the whole unsuitable for the artificial storage of water as even the village ponds dry up very rapidly after the rains. The only irrigation tanks of any size are those mentioned in Chapter I, namely at Chandela near Abu Road and at Pindwāra; both are complete, and are capable of storing water sufficient for 1,235 acres, but unfortunately the Pindwāra tank leaks badly and, though it fills readily every year, is empty by December. The expenditure on these two works has been about Rs. 64,000. In accordance with the recommendations of the Irrigation Commission of 1901–03, the Government of India

sanctioned the detailed survey and estimate (at its own cost) of certain projects suggested as worth investigation, and the result is shown in the interesting report prepared by Colonel Sir Swinton Jacob and Mr. Manners Smith, which gives a list of sites where storage reservoirs, weirs, etc., can be advantageously constructed. The resources of the State are, however, limited, and it will only be possible to carry out the larger works as funds become available.

In the report just mentioned the area annually irrigated from all sources has been estimated at about 36,000 acres or fifty-six square miles, namely 30,000 acres from wells and the rest by means of *kachchā* dams erected across the small streams after the rains. In the north of the State near Manādar the water flows down from the surrounding hills and spreads over the valley, where it is held up by *pāls* or earthen embankments, and gram and barley are sown here in the cold weather; it is estimated that in years of good rainfall about 2,000 acres are brought under cultivation in this way. The wells are said to number 5,180, and water is fairly close to the surface, *i.e.* within thirty or thirty-five feet. The cost of a *pakkā* or masonry well varies from Rs. 450 to Rs. 700, while that of a *kachchā* or unlined one ranges between Rs. 200 and Rs. 300; an average well irrigates about four *bīghas*, or rather more than 1½ acres, in twelve hours. Water is mostly raised by means of the Persian wheel, but, when only a small quantity is required, the leathern bucket is used.

The system of providing money for the sinking of new wells and the repair of old ones is peculiar, and is said to be of long standing. The cultivator contributes nothing, and consequently possesses no rights; and it is only in rare cases that the Darbār or some *jāgīrdār* finds the required sum. As a general rule, recourse is had either to the professional money-lender (*bohrā*) or to the funds of some temple. The work of construction is carried out by State agency, and the lender is gradually repaid by receiving a portion of the Darbār's or *jāgīrdār's* share of the land revenue. When he has recovered, on account of principal and interest, double the sum he originally advanced, the debt has been liquidated, and the well becomes the property of the Darbār or *jāgīrdār* as the case may be. The system seems popular, and in 1905-06 *parwānas* or permits for sinking thirty new wells and repairing 130 old ones were issued to *bohrās*.

RENTS. As in most of the States of Rājputāna, rents in the proper sense of the term are unknown. The Darbār is recognised as the sole proprietor of the soil, and deals directly with the cultivators in *khālsa* villages. The *jāgīrdārs* collect their revenue chiefly in kind, taking from one-fourth to one-third of the produce, and pay to the Darbār tribute varying from three-eighths to one-half of the income of their estates. The subject is further discussed in the following chapter under the subheading "Land revenue."

WAGES. Wages have risen slightly in consequence of the increased demand for labour, and it is reported that men who, twenty years ago, worked four days for a rupee now work only three. At the present time, ordinary blacksmiths, carpenters and masons receive from six to

eight annas a day in the districts, and slightly more on Abu, while the wages of really skilled workmen are of course still higher. Agricultural labourers are sometimes paid in cash (at the rate of 2½ annas a day), but more often get food and clothing and a share of the crop; others, such as carriers and diggers, earn about 1½ annas daily, and the coolies who carry loads up and down Abu receive nine annas per trip, of which half an anna is paid to a contractor. On Abu itself, the daily wage of the ordinary coolie varies between 3½ and 4 annas. The village servants, such as potters, barbers and workers in leather, are, as elsewhere, usually remunerated in kind at each harvest, and also get little perquisites at odd times.

PRICES.

Table No. XLV in *Vol. III-B.* shows the average retail prices of certain food grains in the State as a whole for the periods 1888—90 and 1891-1900 (excluding famine years), and for each subsequent year. There would seem to have been a general rise in prices since about 1895, but the marked fluctuations, so common before the railway was constructed, are no longer met with. In the famine of 1899-1900, wheat, barley and gram were at one time selling for between seven and eight seers per rupee, and maize and *bājra* were only slightly cheaper. Ordinarily, the prices should average:—wheat twelve to thirteen, *bājra* fifteen or sixteen, and barley, gram and maize from sixteen to twenty seers per rupee shortly after harvest time, and a seer or two less later on.

FORESTS.

As observed in Chapter I, a considerable portion of Sirohi is covered with trees and bush jungle but, prior to 1877-78, there was no check upon the wholesale cutting of wood, and the forests were periodically ruined by the Bhīls and other half-savage dwellers in these tracts. Apart from the damage done by *wālar* cultivation, the woods were set on fire annually in order to improve and open out the grazing or to facilitate the hunting of deer, and all these wasteful ways of subsistence were followed on an increasingly large scale as the forest tribes found it more and more difficult to live by robbery and, being pent up within their own wilds, were compelled to draw their food from the soil. As a first step towards conservancy, the indiscriminate felling of trees was prohibited in 1878 and a small staff was entertained, but it was not until 1893 that a qualified ranger was engaged, and the services of a trained forester were secured in the following year.

The forests of the State are of two kinds, namely those of the plains and those of the hills. The former are found in the Bhākar, Khūni, Pindwāra, Rohera and Sāntpur *tahsīls*, and are subdivided into (*a*) reserved, (*b*) protected, and (*c*) open; the area of the reserved and protected portions is about 376 square miles. The forests proper, *i.e.* those of the hills, may be said to be confined to the slopes of Abu and the belt round its base, and receive the special attention of the ranger; the area here protected is approximately nine square miles, and is divided into five blocks or compartments, one of which is closed and reserved for experimental purposes, while the the remaining four are, under certain conditions, open to the public. A list of the

principal trees has been given in Chapter I under "Botany," and the minor produce consists of grass, honey, beeswax, gum, *mahuā* flowers (from which country liquor is distilled), leaves of two or three kinds (used as dinner plates or for rolling up cigarettes), and several varieties of fruits, nuts and roots.

Establishment.

The forest establishment consists of a ranger, a deputy* ranger, four foresters and forty-four guards, and costs about Rs. 350 a month. The actual head of the department was the Superintendent of Customs till September 1906, when the duties were transferred to the *Dīwān*. The ranger has his headquarters at Abu, and the deputy ranger concerns himself mostly with the forests on the plains; the four foresters reside at Khūni, Pindwāra, Sāntpur and Sirohi.

Revenue and expenditure.

During the ten years ending 1900, the annual revenue and expenditure averaged about Rs. 9,100 and Rs. 3,400 respectively, or a surplus of Rs. 5,700, while during the succeeding five years the surplus ranged between Rs. 1,086 in 1903-04 and Rs. 8,033 in 1904-05. The actual figures for the twelve months ending the 31st October 1907, as published in the administration report, were :— receipts Rs. 34,619, *viz.* timber duty Rs. 17,806, jungle produce Rs. 15,715, charcoal revenue (including monopoly fee Rs. 604), and miscellaneous Rs. 494; and expenditure Rs. 6,618, inclusive of compensation to *jāgīrdārs*, rewards and contingencies. The surplus was consequently no less than Rs. 28,001, which is considerably above the average.

MINERALS.

The minerals of the State are unimportant. Traces of gold were found by Major Hughes (of the 43rd Erinpura Regiment) near Rohera in 1897, and, according to tradition, a copper mine was formerly worked in the hills above the town of Sirohi. The marble of which the Jain temples at Abu are built is said to have come from near the village of Jhāriwao on the south-eastern frontier. Limestone is quarried at several places, notably at Selwāra (west of Anādra), Morthala (near Abu Road), and in the vicinity of Sirohi, and mica has been found in large quantities near Deldār in the south-east Good bricks can be made from the stiff clay soil formed in the valleys on Abu by the crumbled felspar, but the general absence of limestone is a serious inconvenience; the granite of the hill is used to a considerable extent for building purposes, but, as it breaks very irregularly in quarrying and is extremely hard, it is expensive to work and not well-adapted for masonry. Fragments of mica are met with in different parts of Abu, and fine specimens of rock-crystal are occasionally picked up. Lastly the compact blue slate, on which the mass of granite rests, crops up here and there on the hill, and is useful for flooring barracks and other purposes where a strong durable stone is required.

ARTS AND MANUFACTURES.

The only important manufactures are sword-blades, daggers, spears, knives and bows, all made at the capital. The State has long been noted for the make and temper of its sword-blades, and

* This post is, however, being abolished.

Tod has written that they were "as famed among the Rājputs as those of Damascus among the Persians and Turks;" fine old specimens, though getting scarce, are still to be had. The work of inlaying with gold and silver on iron (at the capital) is also noticeable, as it has secured medals at various exhibitions. Elsewhere the only industries are the weaving of coarse cotton cloth in a few villages, and the dyeing and printing of cotton fabrics at Abu Road, Sheoganj and some other places; the red cloth and scarves are exported to a small extent. Abu Road possesses a tannery and an ice factory, both of which are private concerns; the former is said to have worked well, but the ice turned out at the latter has hitherto been of rather inferior quality.

COMMERCE AND TRADE.

In the time of the Mughals, when Gujarāt formed one of the richest satrapies of the empire, Sirohi was locally of some importance, being a place of halt for the commercial caravans passing from the maritime provinces to the metropolis and other great cities of India. The State is mentioned by several of the early travellers, but in no flattering terms, for the *Ragipous* or *Razpoots* (as the ruling race was styled) appear to have adopted all the habits of rapine of their Mīnā subordinates, and indiscriminately plundered every one they met. When Tod visited the capital in June 1822, he found the Rao (Sheo Singh) doing his best to further trade and put down crime. Merchants who, three or four years before, would, in entering Sirohi, have literally fallen among thieves, were beginning to return and open their shops, while, "to the utter astonishment of the inhabitants, the Mīnā who was wont, in common with the bear and tiger, to prowl about the grass-covered walks, saw heaps of merchandise and money in the bazar which, by some irresistible and, to him, inexplicable cause, he was withheld from seizing."

During the next forty years or so,—save for broken periods, when the plundering classes got the upper hand and were aided by refractory Thākurs,—matters seem to have progressed fairly satisfactorily, but in 1868 trade suffered much in consequence of the outlawry of Nāthu* Singh and the arbitrary methods of the officials of the Customs department. It was reported that the Darbār itself was unacquainted with the nature of the duties levied or the principle on which they were exacted; the wealth of the people consisted entirely in their flocks and herds, and the only exports were *ghī* for the Bombay market *via* Ahmadābād and sometimes sheep to Deesa. The through traffic was, however, considerable, English piece-goods going northwards, and wool, hides, cotton, felt caps and blankets southwards. The advent of the railway in 1881 did much to develop trade, but the real improvement dates from 1886, when the Customs department was reorganised, a revised tariff was introduced, the old system under which goods were frequently taxed more than once was stopped, and transit-duty was abolished on every article except opium. In the very next year (1887-88) the receipts were nearly double what

* See pages 206-247 *supra*.

they used to be, and the net annual revenue at the present time may be said to average between Rs. 80,000 and Rs. 1,00,000. The actual figures for 1906-07 were :—receipts Rs. 1,73,718 and expenditure Rs. 33,723, or a surplus of nearly Rs. 1,40,000. The receipts are made up of import and export duties,* and the former bring in from five to seven times as much as the latter ; the expenditure includes cost of establishment, compensation to *jāgīrdārs*, remissions and refunds of overcharges, and rewards.

Exports and imports.

The principal exports are *til*, mustard-seed, rape-seed, raw and tanned hides, *ghī*, wool and cotton, and they are sent chiefly to Ahmadābād, Bombay, Cawnpore and Delhi. The main imports are piece-goods, salt, sugar, opium, grain, tobacco, spices and metals, coming for the most part from Agra, Ahmadābād, Ajmer, Beāwar, Bhatinda, Bombay, Cawnpore, Ferozepore, Kotah, Mehsāna, Nadiād, Pachbhadra, Poona, Rewāri, Sahāranpur, Sāmbhar and Sidhpur.

Trade centres, etc.

The chief trade centres are Abu Road, Pindwāra, Rohera and Sheoganj, whence a good many of the imported articles are sent by road into the outlying parts of the adjoining States, namely Dānta, Idar, Jodhpur and Udaipur. These goods are conveyed in bullock-carts where roads exist and are level, and on camels, bullocks, or donkeys in the more difficult parts of the country ; the bulk of the exports and imports is carried by rail. The traders are almost all of the Mahājan caste, and some of them are very enterprising, having business connections in several of the large cities of India.

MEANS OF COMMUNICATION.

Railways.

The Rājputāna-Mālwā Railway runs through the eastern half of the State in a north-easterly direction, and has a length within Sirohi limits of nearly forty miles. There are the following eight stations commencing from the south :—Māwal ; Abu Road, the terminus for Mount Abu ; Kivarli ; Bhīmānia ; Rohera ; Banās ; Pindwāra, whence a fair road runs north-west for about sixteen miles to the town of Sirohi ; and Keshavganj. The line is the property of Government and is on the metre gauge ($3'3\frac{3}{8}''$) ; the section under reference was opened on the 30th December 1880, when the last spike was driven in by Sir James Fergusson (then Governor of Bombay) at Erinpura.

Influence of railways.

The railway has conferred many benefits on the people, and its value is most noticeable in periods of famine when, by facilitating the rapid movement of grain, it prevents local failures from causing great distress. For example, in the famine of 1868-69 wheat and *bājra* at one time sold for less than five seers per rupee—indeed, in October 1869 three seers of wheat for the rupee were with difficulty procurable at the capital—whereas in the much more severe visitation of 1899-1900 the highest quotations were between seven and eight seers. Besides stimulating trade generally and increasing the number of pilgrims to the famous Jain temples at Abu, the railway has to some extent influenced the language of the people, and it is not uncommon to hear a certain amount of Hindustānī and an English word or two intermixed with the local Mārwārī dialect.

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* Transit-duty (at Rs. 5 per maund) is levied only on opium, and the revenue from this source is quite insignificant.

Roads.

The total length of metalled roads is 20, and of unmetalled 224 miles; of the above, $1\frac{1}{2}$ miles metalled and 132 miles unmetalled are maintained by the Darbār, and the rest by either the Government of India or the Abu municipality.

Sirohi-Deesa road.

One of the earliest roads made in this State was a section of the grand trunk-road connecting Agra and Ahmadābād; it enters the territory in the north-east at Erinpura and, after passing Pālri, Sirohi and Anādra, leaves it a couple of miles south-west of Mandār, the length within Sirohi limits being about sixty-eight miles. This road was constructed from Imperial funds between 1871 and 1876, and cost approximately Rs. 1,57,000; the portion between Erinpura and Sirohi was originally metalled but, after the opening of the railway in 1881, was not kept in repair, and the entire sixty-eight miles are now maintained only as a fair-weather communication.

Abu-Kharāri road.

Perhaps the most important (and certainly the best) road in the State is that between Abu and Kharāri. Originally it ran *viâ* Arna to Rikhikishan at the foot of the hill, was eleven miles in length, and was completed in 1875, but, not having been well laid out, the gradients would not admit of its being used by laden camels, and it was decided to adopt a better alignment. Work was started in 1880-81, and the road was ready by 1887, having cost nearly a lakh and a half; it is about seventeen miles long from the Abu post office to the railway station at Abu Road. The Rājwāra bridge over the western Banās was subsequently built at a cost of rather more than a lakh, but the two sums just mentioned by no means represent the total outlay to date, as the roadway has since 1893-94 been metalled, widened and so much improved that it is now used by bullock-carts, *ekkas, tongas* and phaetons. The ordinary cost of maintenance is always high, and storms often cause much damage. The latest improvement has been a diversion between the seventh and eighth miles (from the Kharāri direction), by which the seven successive sharp turnings, known as the *sāt ghūm*, are avoided; this was carried out between 1904 and 1906 and cost rather more than Rs. 72,000. Lastly, it should be added that this road was constructed and is maintained entirely from Imperial funds, and that the Government of India also bore half the cost of the Rājwāra bridge.

The principal roads kept up by the Darbār are a metalled mile at the capital, connecting the palace and garden, and *kachchā* tracks (i) from Pindwāra to Sirohi, (ii) from Rohera to the Udaipur border in the direction of Kotra, and (iii) from Kharāri towards the famous shrine of Amba Bhawāni in the Dānta State.

Post offices.

The State possesses twelve Imperial post offices, namely a head office at Abu Road, sub-offices at Abu, Erinpura, Rohera and Sirohi, and branch offices at Anādra, Jāwāl, Kālandri, Mandār, Pindwāra, Rohera station and Siāna. Abu Road, Pindwāra and Rohera stations are all on the Rājputāna-Mālwā Railway; between Abu Road and Abu the mails are carried by *tongas* twice a day either way, while the other places are served by runners.

Telegraph offices exist at Abu, Abu Road, Erinpura and Sirohi, and those at the various railway stations are also utilised. Telegraph offices.

The country often suffers from droughts more or less severe, but lies in a rainier zone than its neighbour Jodhpur, and its wooded hills generally attract a fair share of the monsoon clouds. In the southern and eastern *tahsīls* there is usually a goodly amount of rain, but over the rest of the State the fall is more often scant than otherwise; this is accounted for by Abu and the Arāvallis drawing to themselves the greater portion of the clouds as they are driven up from the sea-coast by the south-west monsoon. The wheat and barley crops are occasionally damaged by frost or a black blight called *geru*, which is apt to come on if cloudy weather prevails in the spring; locusts are sometimes destructive, but their visits are fortunately rare. There is said to have been famine in 1746, 1785, 1812-13, 1833 and 1848, but no details are available. FAMINES.

In 1868 the rainfall was about one-fourth of the average, and the *kharīf* crops generally failed; the succeeding *rabi* for some time promised well, but most unseasonable weather set in during March 1869, and heavy rain and blight so damaged the ripening crop that the out-turn was only six annas in the rupee. Prices rose considerably, and many migrated to Gujarāt in order to find employment on the various relief works started there. Among the lower castes, such as the Bhīls, Dheds, Girāsias and Mīnās, the famine pressed rather heavily, but the agriculturists suffered much less, as the Darbār took timely measures, through the district officials, to secure them assistance in the way of advances of grain, etc. from the merchants and *bohrās*; the Rebāris, on the other hand, lost most of their cattle. The late chief (Rao Umed Singh) did all that his means permitted to assist his subjects, and was throughout solicitous for the welfare of the numerous aliens who wandered over the country in search of grazing or who passed through to and from the neighbouring territories. Early in November 1868, he issued a proclamation remitting dues on grain and forbidding all obstruction to or interference with its free export and import, and, besides contributing Rs. 100 a month to a relief fund raised by the European residents of Abu and Deesa, he set aside a sum of Rs. 5,000 for the purpose of deepening a tank at his capital. On Abu the Executive Engineer employed as many people as he could, and relief works and poor-houses were started both there and at Anādra and Erinpura. Famine of 1868-69.

Excluding the liberal charity dispensed from His Highness' private purse, the expenditure in connection with this famine appears to have been about Rs. 25,000. The loss of life among Sirohi subjects was, it is believed, much less than in many parts of Rājputāna, but large numbers of Mārwārīs and other foreigners died *en route* to Gujarāt. Owing to want of fodder, from fifty to seventy-five per cent. of the cattle are said to have perished; plough-bullocks and buffaloes were taken most care of on account of their value, but cows succumbed in enormous numbers, and those that survived till the rains of 1869 set in were so reduced in strength that they died by thousands from

surfeit of green grass. The State depended chiefly on Gujarāt for its supply of grain, and immense quantities were imported on camels; but the latter were overworked, numbers died, and the rate of camel hire rose by 100 per cent., thus adding terribly to the cost of food. In 1868, the price of wheat, which in July had been fifteen seers per rupee on Abu and seventeen in the plains below, had by the middle of September risen to seven and eight seers respectively, and soon afterwards was still higher. In the following year, wheat was selling (in July) at between $4\frac{3}{4}$ and $5\frac{1}{4}$, and at the end of September at from $4\frac{1}{4}$ to $4\frac{1}{2}$ seers respectively; these were the quotations for Abu. At Anādra grain was slightly cheaper, but at Sirohi and other towns prices ranged higher and, in October 1869, three seers of wheat could with difficulty be purchased for a rupee at the capital.

Scarcity of 1877-78.

The year 1877 was one of scarcity. The rainfall was scanty—less than eight inches in the plains—and the *kharīf* crops were almost totally destroyed; prices ruled high and the cattle suffered for want of fodder, but no relief measures were deemed necessary.

Famine of 1899-1900.

Famine prevailed throughout the State in 1899-1900. Rather more than the usual amount of rain in June induced the cultivators to plough and sow their fields, but the monsoon practically ceased with the arrival of July, and the result was that, by the beginning of September, the withered crops were being used as fodder. The situation was, however, not so serious as in Jodhpur for, though the harvest had failed, the people could still maintain themselves by the sale of green grass from the hills, and, to help them still further, the Darbār threw open the reserved forests for the free removal of timber and other products, sold grain to the poor at a cheaper rate than that prevailing in the market, and guaranteed the advances made to cultivators by their *bohrās*. The only relief work open at this time was a tank at Pindwāra, but another was started at the capital in December, and the report for that month showed 1,498 persons on works and only six as being gratuitously relieved. At this juncture, the Government of India assisted the Darbār with a loan of two lakhs and placed at its disposal the services of a qualified European engineer. Other works were started, poor-houses were opened, and thereafter the number on relief increased rapidly, though there was a temporary drop in May 1900 when the works were disorganised by a severe outbreak of cholera.

The works consisted of five irrigation projects and four roads, and the number of units relieved between December 1899 and August 1900 was approximately 1,203,000; the classes chiefly represented were Mīnās, Bhīls and Girāsias. The same people, with the lowest village castes, monopolised the gratuitous relief provided by the Darbār, namely five poor-houses and food for the dependents of workers; the number of units assisted in this way was reported to have been about 523,000, which, added to the number relieved on works, gives a grand total of 1,726,000.* In addition, there was a

* The highest number on relief on any one day was 14,136 on the 14th July 1900.

large volume of private charity near railway centres, which took the form of gifts of cooked food. The direct expenditure by the State during this famine was nearly 1½ lakhs, and a further sum of Rs. 48,000 was advanced to agriculturists and others, while remissions and suspensions of land revenue amounted to about Rs. 25,000 and two lakhs respectively.

From the first His Highness the Mahārao personally identified himself with the famine administration and, though systematic relief on the usual lines was not undertaken till January 1900, the opening of the forest reserves and the simultaneous establishment of State depôts for the purchase of wood and grass afforded practically all the help the people required in the earlier stages. Nevertheless, there must have been a certain amount of distress which, owing to the absence of any organised system of relief, remained unattended to. It was estimated that about 2,000 people died of starvation and 5,000 emigrated; if these figures are even fairly accurate, the mortality from other causes, such as cholera in the middle of 1900 and malarial fever in the concluding months of that year, must have been very heavy, for the State lost more than 36,000 inhabitants between 1891 and 1901. Owing to an almost entire absence of fodder, about three-fourths of the live stock perished, and more than 19,000 maunds of hides were exported by railway. As regards prices of grains, the highest quotations were:—*jowār* 7, wheat 7¼, and barley 8 seers per rupee (all in October 1899), and gram 7½ seers (in July 1900).

Scarcity of 1901-02.

Insufficient rainfall and damage by rats caused scarcity in 1901-1902, but only in about half the State. Altogether some 565,000 units were relieved on works or in poor-houses at a cost of Rs. 34,336, and remissions of land revenue amounted to Rs. 10,000. To meet this expenditure, the Darbār had to borrow Rs. 30,000 from Government, and a further sum of Rs. 2,500, received from the board of management of the Indian Peoples' Famine Relief Trust, was distributed among the poorer agriculturists. The Brāhmans of the Saraneshwar temple also assisted many with doles of cooked food at the poor-house maintained by them. The highest prices recorded during this visitation were:—wheat 9⅓, *jowār* 10, maize 11, and barley 11¾ seers per rupee.

Protective measures.

The existence of the railway, of numerous rivers and streams, and of water almost everywhere near the surface renders the State fairly secure from the extreme effects of drought and famine, but much remains to be done. The value and importance of wells, the main source of irrigation in Sirohi, were proved in the famine of 1899-1900 and cannot be overrated; the administration reports for the last two years show that this is recognised by the Darbār. Further protection would be obtained by carrying out, as funds permit, the various projects recommended in the *Report on Irrigation in the Sirohi State*, compiled by Colonel Sir Swinton Jacob and Mr. Manners Smith.

CHAPTER V.

ADMINISTRATIVE.

ADMINISTRATION.

The State is ruled by the Mahārao with the assistance of a *Dīwān*. His Highness' personal staff consists of a Private Secretary and a small clerical establishment. The *Dīwān*, besides supervising all branches of the administration, has been in immediate charge of the Forest department since September 1906; he is aided by a *Naib-Dīwān*, who is also responsible for the general working of the anglo-vernacular school at the capital. Other important officials, all of whom are subordinate to the *Dīwān*, are (i) the Revenue Commissioner, who is the head of the Revenue and Finance departments; (ii) the Judicial Officer, who is also Superintendent of the Central jail; (iii) the Customs Superintendent; and (iv) the Superintendent of Police.

Administrative divisions.

For administrative purposes the State is divided into nine districts or *tahsīls*, each under an official termed *tahsīldār*, who exercises both revenue and judicial powers within his own particular charge (subject to the general control of the Revenue Commissioner and the Judicial Officer as the case may be), but who has, since 1906, been in no sense a police officer. The nine *tahsīls* are: (i) Abu; (ii) Jhora; (iii) Khūni and Sheoganj; (iv) Magrā; (v) Mandār; (vi) Pāmera; (vii) Pindwāra; (viii) Rohera; and (ix) Sāntpur and Bhākar. Each *tahsīldār* has two assistants (*naib-tahsīldārs*)—one for judicial, and the other for revenue work—and a number of minor officers whose duties correspond to those of *patwāris*. Besides the *tahsīls* above mentioned, there are two towns which are treated as separate units and are outside the charge of any *tahsīldār*, namely Abu Road (or Kharāri) which is under a Magistrate, and Sirohi which is under a *Kotwāl*. Lastly, the Magistrate of Abu (an Assistant to the Governor General's Agent) and the Commandant of the 43rd Regiment at Erinpura possess certain judicial powers at these places respectively; the former officer has jurisdiction not only in the civil station of Abu and the road leading thence to the railway station, including the bazar at Kharāri, but also in the village of Anādra at the foot of the western slope of the hill.

CIVIL AND CRIMINAL JUSTICE.

In the administration of justice the courts of the State are guided generally by the Codes and Acts of British India, modified to suit local requirements, and a series of regulations and circulars issued from time to time by the Darbār. The State has had its own Limitation Act and Stamp Act since 1896, and a Registration Act is about to be introduced. Within the charge of the Magistrate of Abu (as defined in the preceding paragraph) and on lands occupied by the Rājputāna-Mālwā Railway, numerous British enactments are in force, and a few have been extended to Erinpura cantonment.

Various courts.

The courts in Sirohi may be grouped under three classes, namely (i) those deriving their authority from the Darbār; (ii) those established by the Governor General in Council with the consent of the Mahārao; and (iii) others or interstatal; they will be dealt with in this order.

Local or State courts.

Of the local or State courts, the lowest is that of the *Kotwāl* of Sirohi, who can pass a sentence of imprisonment up to two weeks and fine up to Rs. 25, and decides civil suits not exceeding Rs. 25 in value. Next come the various *tahsīldārs* and the Magistrate of Kharāri; they are empowered to punish with imprisonment up to two months and fine up to Rs. 100, and to dispose of civil suits not exceeding Rs. 300 in value. Appeals against the decisions of the above (including the *Kotwāl*) lie to the Judicial Officer, who is both District Magistrate and District Judge, while the *Dīwān* has the powers of a Sessions Judge, hears appeals against the decrees of the Judicial Officer, and takes up all suits exceeding Rs. 3,000 in value. All cases of importance are laid before His Highness, who alone can pass sentences of death on his own subjects; he is the final appellate authority in all matters, and can alter or modify the order of any court mentioned above. The criminal work of the courts is not heavy, and the civil suits—many of which are decided by *panchāyat* —usually relate to small money transactions; appeals are comparatively rare.

The Darbār claims full jurisdiction throughout the State (except where it has been ceded to the British Government), and only one *jāgīrdār* (the Thākur of Nībaj) has been invested with limited powers, which he can exercise in cases in which both parties are residents of his estate. Appeals against his decisions and cases beyond his powers are heard by the Judicial Officer.

British courts.

Turning now to courts established by the Governor General in Council, mention may first be made of those having jurisdiction in that portion of the State which is occupied by the Rājputāna-Mālwā Railway. The civil suits are disposed of by the Assistant Commissioner of Merwāra, who has the powers of a Court of Small Causes and a District Court. Criminal cases are decided either by the Superintendent of the Railway Police or his Assistant, who have respectively first and second class magisterial powers, or by the Resident, Western Rājputāna States (a District Magistrate), while the Commissioner of Ajmer is the Sessions Judge, and the Governor General's Agent the High Court.

Civil and criminal jurisdiction in the civil station of Abu, including the road thence to Abu Road railway station and the village of Anādra, was granted to the British Government by the late chief in 1866, and in the Kharāri bazar by the present ruler in 1881, except in cases in which both parties are Sirohi subjects. This jurisdiction is exercised by an officer termed the Magistrate of Abu who, on the civil side, has the powers of a Judge of a Court of Small Causes, as defined in the Abu and Anādra Small Cause Courts Law of 1889, and of a District Court (the Governor General's Agent being the Appellate

and High Court), while, on the criminal side, he is a District Magistrate (the Commissioner of Ajmer-Merwāra and the Governor General's Agent being respectively the Court of Session and the High Court).

Lastly, the Magistrate of Abu (within his charge), and the Resident, Western Rājputāna States, and the First Assistant to the Governor General's Agent (throughout Rājputāna)—being European British subjects—are Justices of the Peace, committing for trial to the High Court at Bombay.

Interstatal courts.

The interstatal courts, namely the Mārwār Court of Vakīls at Jodhpur, the Upper Court of Vakīls at Abu, and the Border Courts, have already been described —see page 139 of this volume and page 67 of Vol. II-A.

FINANCE.

Nothing is known of the revenue of the State in olden days. Tod wrote thus in 1822:—"The fiscal revenues of Sirohi may, with the continuance of tranquillity, reach three or even four lakhs of rupees annually, and the fiefs of the vassals half as much more." In 1854 the State was involved in pecuniary difficulties, and for eleven years the Government of India exercised a general superintendence. On the 1st September 1865, after all debts had been liquidated, the administration was handed over to the late Rao, and the treasury contained Rs. 42,365. The *khālsa* income in 1866-67 was reported to be about 1·4 lakhs, towards which land revenue contributed Rs. 69,700, transit-dues Rs. 29,300, and a special tax on account of the marriage of the chief's sister to the Mahārājā of Jodhpur Rs. 23,600, while the expenditure exceeded the income by Rs. 15,000, the main items being troops and contingent expenses Rs. 30,000, stables, camels, elephants and bullocks Rs. 26,000, marriage expenses Rs. 18,400, and tribute to Government Rs. 7,500. The above figures are all in the Bhīlāri currency, the rupee of which then exchanged for from 15 to 15¾ British annas. Within a couple of years, the State again became financially embarrassed and, on the accession of the present ruler in 1875, the debts amounted to somewhat less than a lakh of rupees. These were paid off by 1879-80, and thereafter the revenue rose steadily till it reached 2·10 lakhs in *1884-85*, 3 in *1893-94*, 3·82 in *1895-96*, and finally 4·21 lakhs in *1896-97*. It should be mentioned that these figures are in the Bhilāri currency, and that 4·21 lakhs of Bhīlāri rupees represented at that time approximately four lakhs of Imperial rupees.

Present revenue and expenditure.

In consequence of the famine of 1899-1900, the decrease in population, and several indifferent seasons, the revenue has declined and, in a normal year, now amounts to about 3½ lakhs (British coin). The chief sources are:—customs-duties rather more than a lakh; land revenue, including the proceeds of a house-tax (*ghar-ginti*) and grazing fees, Rs. 80,000; fines, succession tax, etc. Rs. 28,000 to Rs. 30,000; excise Rs. 20,000; miscellaneous contracts connected with bones, hides, etc. Rs. 18,000; payments made by Government under the salt agreement of 1879, Rs. 10,800; forests, Rs. 8,000 to Rs. 10,000 (net); and court-fees and stamps about Rs. 7,000. The

ordinary expenditure may be put at 2·8 lakhs, the main items being army and police Rs. 56,000; household expenditure of His Highness and family Rs. 35,000; Customs department Rs. 26,000; judicial and revenue staff Rs. 23,000; stables, including camels, etc., Rs. 20,000; Public Works department Rs. 7,000; and tribute to Government Rs. 6,900 in round numbers. The above figures represent only the fiscal receipts and disbursements, as shown in the published accounts; certain villages are set apart for the Mahārao's personal expenditure, and the revenue derived therefrom is paid into his private treasury. The average annual sum thus credited is not known, but His Highness contributed from this source more than Rs. 24,000 towards the lakh spent on the occasion of his eldest daughter's marriage to the Mahārāj Kunwar of Bānswāra in 1905. Similarly, there is very little on record regarding the yearly income of the *jāgīrdārs* and others holding villages or lands on favoured tenures, but the Darbār roughly estimates it at about 3·4 lakhs, and in this way it may be said that the entire revenues of Sirohi are approximately 7½ lakhs in a normal year.

Owing to the recent famine and scarcity and other causes, the State is in debt to the extent of about 4·5 lakhs, of which sum 1·3 lakhs are due to the Government of India. Against this, the realisable assets are estimated at only Rs. 20,150. With fair seasons, careful management, and the exercise of strict economy the debts might be liquidated in seven years. Financial position.

Sirohi has never had a mint of its own. The coins current here till recently were (i) *Kaldār* or British, (ii) Dabhu Shāhi copper pieces, and (iii) Bhīlāri rupees. The Dabhu Shāhi coins came from Jodhpur, and are the same as the Bijai Shāhi; they were called *dabhu* from their great weight. The Bhīlāri rupees took their name from the town of Bhīlwāra in Udaipur, where they were minted in the eighteenth century. They were formerly of nearly the same value as the similar British coins, but they gradually depreciated till one Bhīlāri rupee exchanged for fourteen Imperial annas in 1900 and for thirteen from 1901 to 1903. The fall in the exchange value was due to a greater demand for *Kaldār* rupees wherewith to pay for increased imports during the years of famine and scarcity, 1899-1900 and 1901-02. In these circumstances, the Darbār resolved to convert the Bhīlāri rupees and introduce Imperial currency in their stead. The Government of India agreed to give, up to a limit of fifteen lakhs, 100 Imperial in exchange for 120 Bhīlāri rupees—this being the average rate of exchange during the six months ending the 30th November 1903—and, in accordance with a notification previously issued, the conversion operations lasted from the 1st December 1903 to the 31st May 1904. The number of rupees tendered for conversion during the six months was 989,886,* and these were duly recoined at the Coinage.

*This is the figure given by the Darbār, but, according to the *Financial and Commercial Statistics of British India* (twelfth issue), only 617,071 Bhīlāri rupees were sent to the Bombay mint and recoined there, namely 470,921 in 1903-04 and 146,150 in 1904-05.

Bombay mint, the cost (to the Darbār) of the operations, including establishment, packing, transit charges, etc., being Rs. 4,766-9-0, or between seven and eight annas for every hundred rupees dealt with.

LAND REVENUE. Tenures.

As regards rights in land, the rules and customs of Sirohi appear to correspond with those generally prevailing in Rājputāna in that the chief of the State is the actual and absolute owner of the territory conquered by his ancestors. Those who accompanied the latter received estates on certain conditions of fealty and military service, and became the Thākurs or nobles, but the Rao still retained the ownership of all the land. This rule is of course subject to exceptions and, in the case of Sirohi, the Girāsias, the original inhabitants of the Bhākar, continue to possess *bhūm* rights. It may therefore be said (i) that, excluding the Girāsia tract, the conquered territory was divided among the Chauhān nobles who came with the chief, the latter retaining a comparatively small portion as *khālsa*; and (ii) that this *khālsa* portion has always been, and still is, subject to constant fluctuations, being increased by lapses and confiscations, and diminished by grants to immediate members of the ruling family, to State servants or adherents for good service, and to temples and other religious institutions.

The three main tenures are those common to Rājputāna, namely *jāgīr*, *sāsan* and *khālsa*, and it is estimated that, at the present time, the *khālsa* lands occupy about 695 square miles, or rather more than one-third of the entire area of the State. Of the 413* towns and villages, 158 are said to be *khālsa*, 203 *jāgīr* and 52 *sāsan*.

Jāgīr.

The *jāgīrdārs* may be divided into three classes, namely (i) the immediate relatives of the chief, who received certain villages for their maintenance which they enjoy as long as lineal descendants exist; (ii) the Thākurs or descendants of those who assisted in conquering the country; and (iii) those who have obtained estates as a reward for good service. All pay tribute varying from three-eighths to one-half of their income, sometimes in cash and sometimes in kind, besides *nazarāna* or fee on succession according to their means, and have also to serve with their quotas of horsemen and foot-soldiers when called upon. In the case of the chief's relatives, the right of adoption is not recognised, but the Thākurs, if they have no sons, may adopt with the approval of the Darbār. Those who hold land in reward for services do so subject to the pleasure of the Mahārao. Among the two first classes mentioned above, succession is by primogeniture, provision being made for younger sons, and these subdivisions have in some cases been so frequent that many of the *jāgīrdārs* have been reduced almost to the status of a mere cultivator; their condition generally is far from satisfactory, and they are mostly poor and in debt. Lastly, every *jāgīr* estate is inalienable, *i.e.* it cannot be sold or transferred; a portion may, however, be mortgaged with the sanction of the Darbār, but foreclosure would not be allowed. A list of

*This was the number in 1901; since then a new *khālsa* village (Mirgarh in the Sāntpur *tahsīl*) has been founded.

the principal *jāgīrdārs* will be found in Table No. XLVI in Vol. III-B.

Sāsan lands are those granted to temples and members of religious castes such as Brāhmans, Chārans and Bhāts; they are for all practical purposes grants in perpetuity and are held rent-free, but, like *jāgīr* estates, they cannot be alienated. *Sāsan.*

In the *khālsa* or crown lands the system is *ryotwāri* and, though the Darbār is the sole proprietor of the soil, the *ryots* or cultivators, who are not very numerous and are too valuable to be parted with, undoubtedly possess a sort of permanent occupancy right which is well understood and is always respected so long as they pay the revenue demand regularly. The State makes the best terms it can with the cultivator and, on the latter's death, his land is divided among his sons who do not have to pay *nazarāna*. In the Bhākar, the Girāsias, as already observed, retain their *bhūm* rights, that is, they hold free of rent or at reduced rates on condition of some particular service, such as watch and ward of their village, while the Loks of Abu have certain hereditary privileges and hold their lands on very easy terms. *Khālsa.*

The land revenue is mostly collected in kind, and the Darbār's share varies from one-fifth to one-third of the produce according to the caste of the cultivator; the purely agricultural classes pay on the higher scale, while Rājputs, Bhīls, Mīnās and Kolis (who belong to the *Dewāli band* or protectors of the village), as well as Brāhmans, Mahājans and some others are favoured. The Darbār's share used to be realised by an actual division of the produce, called *batai*, but, as the grain was damaged by lying for some time on the threshing-floor and the State consequently received a diminished quantity, this system was recently abolished and replaced by one known as *kankūt*, under which the share is taken by a division based on a conjectural estimate of the standing crops. In parts, the revenue is paid in cash at rates ranging from Rs. 2 to Rs. 5 per plough, or per pair of bullocks working the wells Since 1903-04, a third system, known as *bīghotī* or a cash rate per *bīgha* cultivated, has been in force; it was at first introduced in only three subdivisions, but is being rapidly extended to other parts and is said to find favour. The rates per *bīgha* vary from eight annas to Rs. 5; the similar figures per acre work out to R. 1-4 and Rs. 12-8. Outside the *khālsa* villages, collections in kind are still most prevalent. Mode of assessment and collection.

The miscellaneous revenue is derived from opium, salt, liquor, hemp drugs and stamps, and averages about Rs. 39,000 yearly. MISCELLANEOUS REVENUE.

The poppy is hardly cultivated at all, and only for medicinal purposes, but a good deal of opium is imported from outside (chiefly Kotah and Mālwā) for local consumption. Import, export and transit-duties are levied—the rates per maund being Rs. 200, Rs. 10 and Rs. 5 respectively—and bring in about Rs. 5,500 a year, but this sum is included among the receipts of the Customs department. The opium revenue proper is derived from license-fees taken from vendors of the drug, and amounts to somewhat less than Rs. 500 yearly; there were 114 licensed shops in 1904-05, 117 in 1905-06, and as many as Opium.

200 in 1906-07. Under rules issued in 1902, no opium can be imported into, exported from, or conveyed within the State without a pass or permit, but a private individual is allowed to possess and carry up to ten tolas* for *bonâ fide* personal use. Wholesale and retail dealers have also to keep proper accounts of sales and purchases, and their stocks and books are at all times open to the inspection of the Superintendent of Customs, who is charged with the proper enforcement of the regulations.

Salt. The only revenue derived from salt is a sum of Rs. 10,800 which is received annually from the British Government under the agreement of 1879, as supplemented in 1882 and modified in 1884. The manufacture of this commodity in Sirohi is absolutely prohibited, and no salt other than that upon which duty has been levied by Government is brought into the State. There being no local tax of any kind, no account is kept of the amount imported, and it is not possible to give the average yearly consumption per head, but the Darbār estimates it at about 4½ seers.

Liquor. Country liquor is prepared by distillation from the *mahuā* flower, and is largely consumed by Rājputs, Bhīls, Mīnās, Girāsias, and almost all the lower castes of agriculturists and artisans. The right of manufacture and sale is leased for a term of years to a contractor, from whom a fixed sum is recovered by instalments; the annual revenue is approximately Rs. 20,000, and the number of shops increased from sixty-four in 1904-05 to sixty-seven in the following year. The use of imported spirits is practically confined to Abu, Abu Road and Erinpura.

Drugs. The drugs derived from the hemp plant, such as *gānja*, *bhang* and *charas* were formerly unknown in the State, and are now sold only at Abu, Abu Road and Sirohi where they are consumed almost entirely by foreigners. All are of course imported; there are four shops and the license-fees yield about Rs. 400 a year.

Stamps. The stamp revenue fluctuates with the nature of the seasons, which encourage or discourage litigation according as they are good or bad, but the annual average may be said to be between Rs. 7,000 and Rs. 8,000. Towards this, court-fees (levied in cash) contribute about Rs. 5,000, the sale of stamp papers for petitions (introduced in 1869 and worth four annas each) Rs. 1,200, and stamp papers for deeds (varying in value from one anna to Rs. 10 and first issued in October 1896) Rs. 1,800.

MUNICIPAL. Sirohi cannot be said to contain any municipalities in the true sense of the term, but small committees have been constituted at Abu, Abu Road and Sheoganj. The municipal and sanitary committee of Abu appears to date from the year 1865 (if not earlier), and now consists of six members, all of whom are nominated by the Governor General's Agent, to whom the proceedings are submitted for confirmation. The members are the Superintending Engineer, Rājputāna, who is President; the Magistrate of Abu, who is both

* One tola = 180 grains Troy (the exact weight of the British rupee).

Secretary and Vice-President; the Residency Surgeon and Chief Medical Officer, Rājputāna; the Executive Engineer, Abu division; the Officer Commanding the Station hospital; and the Commandant of the sanitarium. The average annual receipts are about Rs. 11,000, derived mainly from a conservancy cess, taxes on dogs, horses, ponies and rickshaws, and a contribution of Rs. 3,000* from His Highness the Mahārao, while the expenditure is usually slightly less. The chief items of expenditure are sanitary arrangements; lighting; garden; water-supply; drainage; upkeep of roads; contribution towards vaccination operations; grant-in-aid to a vernacular school; etc. At Abu Road and Sheoganj no regular committees exist, though it is proposed to establish one at the first of these places. As matters stand, the Darbār officials and the local Hospital Assistant look after the lighting and sanitation, and the expenditure (about Rs. 1,200 a year at Abu Road and Rs. 700 at Sheoganj) is met partly from the State treasury but mainly from a conservancy cess.

PUBLIC WORKS.

The Public Works department is under the *Dīwān*, and the staff consists of an overseer and two surveyors; temporary hands are engaged as required. The duties of the department are to look after State buildings, tanks, and some of the roads (chiefly unmetalled ones), and to carry out such original works as may be sanctioned. The usual annual allotment is about Rs. 7,000. In addition, the department constructs wells and irrigation works from funds provided by *bohrās* under the system described at page 263 *supra*; the sum available varies from year to year, and is often considerable. For example, the total Public Works expenditure in 1904-05 was Rs. 47,180, of which Rs. 40,116 were found by *bohrās* or from temple funds, while during 1906-07 the actual outlay was Rs. 38,350, towards which *bohrās* contributed about Rs. 7,500. The principal works carried out during recent years have been the jail, the hospital and the *zanāna* palace at the capital; the tanks at Chandela and Pindwāra; the Kesarganj *kothī* at Abu Road; and several houses at Abu, including one for His Highness and another for his son.

Mount Abu is the headquarters of the Rājputāna circle of the Imperial Public Works department (formed in 1863), and of the Abu division thereof. The latter has constructed and still maintains almost all the metalled, and nearly half of the unmetalled roads in the Sirohi State, and is responsible for the upkeep of the numerous Government buildings on the hill, as well as of those at the cantonments of Erinpura, Kherwāra, Kotra and Deesa.

Army.

The military force consists of a company of 120 infantry, five gunners and eight guns, and the annual cost is about Rs. 10,000 or Rs. 11,000. The infantry is located at the capital, where it is employed in guarding the jail and on other miscellaneous duties, but it is occasionally sent out to suppress crime or overawe *jāgīrdārs* and others when they assume a turbulent attitude; the men wear uniform, receive a certain amount of training and drill, and are armed with muzzle-loading guns and bayonets. Of the eight pieces of

* This is being raised to Rs. 8,000 with effect from the year 1908.

ordnance, five are said to be serviceable. The cantonment of Erinpura in the north-east is the headquarters of the 43rd Regiment* of native infantry, and there is a detachment of this corps at Abu which is also the sanitarium* for British troops of the Mhow or 5th Division of the Southern Army. The Darbār pays for no local corps or contingent and maintains no Imperial Service troops, but has offered to place 100 infantry at the disposal of Government for the defence of the Empire. Including the cadet company at Abu, about 110 members of the Bombay, Baroda and Central India Volunteer Rifles reside in the State.

POLICE. State force.

The police force has recently been reorganised and now numbers 675 of all ranks, including a Superintendent, five *naib-faujdārs*, three *jemadārs*, eighty *thānadārs* and sixty-six mounted constables. There is thus one policeman to about every three square miles of country and to every 230 inhabitants. Formerly each *tahsīl* had its sub-inspector, whose work was supervised by the *tahsīldār*, and these officers were jointly responsible for the peace of the district under their charge; but it was found that the *tahsīldār's* other duties occupied almost all of his time, and, under an arrangement introduced in June 1906, he has ceased to be a police officer. The State is now divided into nine circles, each† of which is under a *naib-faujdār* or a *jemadār* who is directly subordinate to the Superintendent and who submits weekly diaries to the Judicial Officer. The force costs about Rs. 46,000 a year, and is distributed over eighty police stations and forty-one outposts; the men are mostly Rājputs and Mīnās, and are armed with swords and country-made muskets. In the *jāgīr* estates the Superintendent supervises the working of the police, but the arrangements are far from satisfactory as the men employed have received no training whatsoever.

Working of State police.

The administration reports for the last ten years show that about 820 cognisable cases are reported annually—dacoities averaging 13, highway robberies 9, thefts 98, cases of cattle lifting 86, and of housebreaking 85—and there was much violent crime between 1900 and 1902. About fifty-seven or fifty-eight per cent. of the persons sent up for trial are usually convicted, and one-fourth of the stolen property is said to be generally recovered. The duties of the police are not easy as the Bhīls and Mīnās of both Sirohi and the adjoining States are mischievous and wild and hard to keep in order; moreover the numerous hills and woods afford criminals excellent shelter when they are pursued.

Railway police.

On that portion of the State which is occupied by the Rājputāna-Mālwā Railway, the Government of India maintains a separate police force; it belongs to the Bombay‡ establishment, and is under the orders of the Inspector-General of Police of that Presidency.

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* For further details see the articles on Erinpura and Abu in Chapter VI *infra*.
† Except the Anādra circle which is under the Thākur of Nibaj.
‡ The force is about to be placed under the Governor General's Agent in Rājputāna.

JAIL.

The Central jail is at the capital, and there are lockups at the headquarters of each *tahsīl*. The building formerly used as a jail had accommodation for fifty-five convicts (fifty males and five females), but, being too small, badly ventilated, defective in sanitary arrangements and insecure, was unsuitable for a prison. The present Central jail was constructed in 1891-92 at a cost of about Rs. 36,000, and can accommodate 120 male and 15 female prisoners; it consists of three barracks, each measuring 120 by 18 feet and provided with barred windows reaching to the floor, and is surrounded by a masonry wall eighteen feet in height. Some of the convicts are employed at the lithographic press, where forms, registers and various circulars and notifications issued by the Darbār are printed; others grind grain, make bread, weave cotton carpets, or work in the garden or on roads. A reference to Table No. XLVII in Vol. III-B will show that during the last ten years the daily average strength has ranged between 79 in 1898 and 161 in 1902, and the cost of maintenance between Rs. 4,129 in 1905 and Rs. 8,242 in 1902. The jail is a healthy one, and the comparatively high death-rate in 1900 was largely due to the weakened condition of many of the convicts on their admission. The lockups in the districts are capable of accommodating about ten persons each, and are only used for those who have been sentenced to two months' imprisonment or less.

EDUCATION.

At the last census, 10,590 persons or nearly seven per cent. of the people (12·4 per cent. of the males and 0·6 of the females) were returned as able to read and write. Thus, in regard to the literacy of its population, Sirohi stood first among the States and chiefships of the Province, a position due to the comparatively large community of Europeans, Eurasians and educated natives residing at Abu, Abu Road and Erinpura. Among the three main religions, the Jains as usual showed the way, more than thirty-two per cent. of them being literate, and they were followed by the Musalmāns and Hindus with about twelve and three per cent. respectively.

The Darbār itself does very little to encourage education, the annual expenditure varying between Rs. 700 and Rs. 1,300, namely the cost of maintaining a single school at the capital in which Urdu, Hindī and a little English (up to the Middle standard) are taught to some sixty boys. Private institutions of the indigenous type, such as *pāthshālas*, exist in every town and large village and appear to be popular, but their managers send in no returns to the Darbār, and nothing is known of them except that the instruction imparted is of the most elementary character. At Abu Road the railway authorities have a primary school for the children of their European and Eurasian *employés* and an anglo-vernacular high school—the latter of which is aided by Government—while Abu possesses three educational institutions, namely (i) the Lawrence* school for the children of British soldiers; (ii) a high* school for Europeans and Eurasians, which was formerly maintained by the Bombay, Baroda and Central

* For further particulars see the article on Abu in the next chapter.

India Railway, came under private management in 1903, and is about to be placed under a board of control consisting of Government officers; and (iii) a primary vernacular school supported by the municipality. It will be seen from Table No. XLVIII in Vol. III-B that the daily average attendance at these six schools in 1906-07 was 425 (365 boys and 60 girls), and that the number of students borne on the rolls was 510.

MEDICAL. Hospitals.

Including the hospital for British troops at Abu and the regimental hospital at Erinpura, both of which are of long standing, there are altogether eight medical institutions in the State. Of these, the two above-named are maintained by Government; three, namely the Crosthwaite hospital and the palace dispensary—both at the capital—and a hospital at Sheoganj, by the Darbār; two, namely the Adams' Memorial hospital at Abu and the charitable hospital at Abu Road, partly by Government and partly from private subscriptions; and one (at Abu Road) by the railway authorities for the benefit of their servants quartered there. They have accommodation for 133 in-patients and, excluding the palace dispensary—where no records are kept—33,970 cases were treated and 1,662 operations were performed in 1907;* the daily average number of in-patients during the same year was 43, and of out-patients about 322.

Table No. XLIX in Vol. III-B is unfortunately incomplete—even for the years 1906 and 1907—inasmuch as, though we know the number of hospitals in 1881, 1891, 1901, 1906 and 1907, statistics showing the work done are available for only some of the institutions. The first hospital was that established at Erinpura (about 1836-37) for the use of the old Jodhpur Legion, and it was followed a few years later by two at Abu, one for invalid British soldiers and the other for the civil population generally; the latter was styled the Rājputāna Agency hospital. The earliest State institution was a small hospital opened at the capital in March 1868, and, in the same year, Abu and Anādra each received a dispensary, which were kept up mainly by voluntary contributions. So matters remained till 1887, when the Anādra dispensary was closed and the staff, etc. transferred to Abu Road which, owing to the advent of the railway, had become a populous locality. Since then, the following changes and additions have been made:—(i) the establishment of hospitals at Sheoganj and Abu Road—the latter solely for railway *employés*—as well as of a palace dispensary at Sirohi; (ii) the replacement of the old hospital at the capital by a much better building, which was called after Sir Robert Crosthwaite (then Agent to the Governor General) and was formally opened on the 7th December 1897; and (iii) the construction of the Adams' hospital at Abu, in memory of the late Lieutenant-Colonel Adams, I.M.S., who had long been connected with Rājputāna and, as stated at page 252 *supra*, died of cholera

* For details see Table No. L in Vol. III-B.

† A village at the foot of the western slopes of Mount Abu, where, in former times, the Vakils attendant on the Governor General's Agent mostly resided and kept their following.

in May 1900. This last institution was opened in 1902, having cost about Rs. 18,000 (contributed by the numerous friends—Native as well as European—of the deceased officer), and took the place of the old Agency hospital and charitable dispensary.

Vaccination on modern lines was started in Sirohi in 1859, but work was confined to Abu and Anādra, where from 1,500 to 2,000 persons were successfully vaccinated. The services of a second vaccinator having been secured in 1873, operations were extended to the rest of the State and have been carried on continuously ever since. The strength of the staff employed has ranged between two (1873—87) and five (1898—1903); there are at present three vaccinators, two of whom are paid by the Darbār, while the third (at Abu) draws his salary partly from municipal and partly from local funds. During the last thirty years, more than 127,000 vaccinations have been performed (or an annual average of 4,238), and of these, 121,168 (or ninety-five per cent.) were successful. The annual average number of successful operations during the last three years—when particularly good work seems to have been done—has been 7,206, or a ratio of nearly forty-seven per 1,000 of the population. As will be seen from Table No. XLIX, where some further details are given, 7,368 persons were successfully vaccinated in 1906-07 at a cost of fourteen pies per head. The expenditure by the Darbār on medical institutions, including vaccination, is about Rs. 5,000 a year. Vaccination.

The system of selling quinine in pice packets at post offices has been in force for some time. In 1901-02, thirty-nine packets, equal to 3,978 doses of five grains each, were sold; three years later the packets were made up into 7-grain doses, and 2,223 were disposed of in 1906-07. Sale of quinine.

The State has been topographically surveyed on a scale of one inch to the mile by the Survey of India, and the area, as calculated in the Surveyor General's office by planimeter from the standard sheets, is 1,964 square miles, exclusive of disputed lands. The operations of the Great Trigonometrical Survey of India extended to Sirohi in 1850—52 and again about twenty years later; the territory lies within what are known as the Jodhpur and the Abu Meridional Series. There has been no local survey of any kind. SURVEYS.

CHAPTER VI.

MISCELLANEOUS.

Position, shape, height, etc.

Abu (*Ar-budha*, the hill of wisdom).—A celebrated mountain in the south of the Sirohi State, situated between 24° 31′ and 24° 43′ N. and 72° 38′ and 72° 53′ E. Although regarded as part of the Arāvalli range, it is completely detached from that chain by a valley, seven miles across, through which flows the western Banās, and it rises suddenly from the flat plain like a rocky island lying off the sea-coast of a continent. In shape it is long and narrow, but the top spreads out into a picturesque plateau nearly 4,000 feet above the sea, about twelve miles in length and two to three in breadth. At the southern end (in 24° 36′ N. and 72° 43′ E., seventeen miles north-west of Abu Road on the Rājputāna-Mālwā Railway and 442 miles north of Bombay) lie the civil station and barracks, surrounded by peaks and ridges, while towards the northern extremity is Gurū Sikhar (the hermit's pinnacle), which is 5,650 feet above sea-level and the highest point between the Himālayas and the Nīlgiris. Scattered about the hill are several small villages which, with the civil station and bazar, form the Abu *tahsīl*.

Configuration and scenery.

The natural features are very bold, and the slopes—especially on the western and northern sides—extremely precipitous; on the east and south the outline is more broken by spurs with deep valleys between. The traveller, when ascending the mountain, can hardly fail to be impressed with the grand and beautiful scenery; the gigantic blocks of syenitic rocks, towering along the crest of the hill, are especially striking, being in many cases so weather-worn as to present the most fanciful and weird shapes, while, in others, they appear so slightly balanced as to be in danger of rolling down. In places, too, the face of the cliffs has been moulded into rounded caverns and holes resembling the section of a largely magnified sponge, while the brow often overlooks an absolute precipice, three or four hundred feet of sheer descent. The scenery in the interior of Abu is soft and romantic rather than grand, but very beautiful of its kind. The constant succession of hills and valleys, with occasional peeps of the distant plains, and the black, grey and purple tints of the curious and grotesquely shaped rocks,* contrasting with the varied greens of the trees and shrubs, all combine to form the most charming landscape scenery. As may be expected, it is during and just after the rains that the place wears its most pleasing aspect.

* Two of these rocks are called the Nun and the Toad from their resemblance in outline to a veiled woman and an immense toad respectively; the former was struck by lightning in 1890, and the piece of stone representing the nose was detached.

The beauty of Abu is much enhanced by the Nakhi Talao, or lake said to have been excavated by the finger-nails (*nakhi*) of the gods. Tod described it as about four hundred yards in length and the counterpart of the lake three miles above Andernach on the Rhine, while Fergusson knew no spot in India so exquisitely beautiful. It is now about half a mile long by a quarter of a mile broad, and is most picturesquely situated between high hills except at the western end, where a view of the plains is obtained through a gorge. The slopes and ravines in the vicinity are well—wooded, and several rocky islands add to the charm of the scene. The lake is shallow on the eastern side towards the bazar, but is from twenty to thirty feet deep near the dam on the west. The Nakhi Talao.

The slopes and base of the mountain are clothed with fairly dense forests of the various trees common to the plains and the neighbouring Arāvalli range, interspersed with great stretches of bamboo jungle. Owing to its comparatively heavy rainfall, Abu is, as regards vegetation, by far the richest spot in Rājputāna. On the higher parts, humid types appear which are quite unknown below; most noteworthy of these is an epiphytal orchid (*āmbārtari*), which clings to mango and other trees and in the rains produces fine racemes of delicate pink or lilac flowers; three varieties of ground orchid are also found. The occurrence of white and pink wild-roses—much used for hedges and a beautiful sight when in full bloom—and of a stinging nettle (*Girardinia heterophylla*) at once reminds the visitor that he has left the arid region below while the *karanda* (*Carissa carandas*) is so abundant that during part of the hot season its white flowers scent the air for miles round the station with their delicious fragrance. Magnificent trees of *champā* (*Michelia champaca*) are not uncommon, especially near temples—the handsome and heavily scented yellow flowers being used for garlands, and the wood in the manufacture of guitars—and weeping willows (*Salix babylonica*) adorn the margin of the Nakhi lake, but both these species, as well as several varieties of jasmine, are doubtfully indigenous. Lastly, there is the *kāra* (*Strobilanthus callosus*), a large shrub which blooms only once in six or seven years, but its blue and purple flowers, when they appear, make a great show in September. Numerous kinds of ferns occur, but, on account of the winter frosts and the long dry season which follows the rains, most of them die down annually, and only begin to sprout again with the arrival of the monsoon. The following are some of the best known:—*Adiantum caudatum* and *lunulatum*; *Actiniopteris radiata*; *Cheilanthes farinosa*; and *Nephrodium cicutarium* and *molle*. Maidenhair (*Adiantum capillus Veneris*) is to be found in a few places, but the rattlesnake-fern (*Botrychium virginianum*) is very rare. Many of the creepers flourish, such as three varieties—blue, red and yellow—of the passion-flower (*Passiflora*); the yellow jasmine (*Gelsemium*); *Bignonia venusta*; *Hiptage madablota*; *Bougainvillea spectabilis*; the morning-glory, purple in colour (*Ippomœa purpurea*); *Wisteria linensis*; and two kinds of honeysuckle, namely the English woodbine (*Lonicera periclymenum*) Botany.

and the trumpet or coral honeysuckle of America (*L. sempervirens*) which is red on the outside and yellowish within.

Fauna. To the account of the fauna given at pages 233-234 *supra* it may be added that the hyæna has been seen on the hill, but the jackal and fox never; porcupines are numerous and cause considerable damage to gardens and crops. Snakes are fairly common, but only the cobra (*Naia tripudians*) and a species of viper (*Echis carinata*) are venomous. Small crabs abound in pools and streams, and the people who eat them say that they are of good flavour. Of fishes found in the Nakhi Talao, the best known are the *gīri* (*Barilius modestus*), which has scales and a dark brown back, and grows to about eight or ten inches in length; the *singhī*, a sort of catfish belonging to the family *Siluridæ*, from six to eight inches long and scaleless; and the *pathal* or *pathra* (*Notopterus kapirat*), somewhat oval in shape, with the dorsal fin short and far back and the anal fin very long. All the above are more or less bony—particularly the last—and practically useless for the table; they take bait readily at certain times and are most easily caught during the rains. Some murral were put in about thirty years ago, but they seem to have disappeared and have probably been eaten by others, of whom there are a few.

Climate, rainfall, etc. An account of the climate, temperature and rainfall, and of the earthquakes which periodically occur, has been given at pages 234-235 *supra*, and some further details regarding temperature and rainfall will be found in Tables Nos. XXXV to XXXVII in Vol. III-B.

History. According to tradition, Mount Abu was formerly a level plain stretching to the Arāvallis and the favourite resort of gods and sages. At one spot was a huge chasm of unfathomable depth, into which the cow Nandini, who used to supply the Muni Vasistha with anything he asked for, happened to fall. In his distress, the sage called on the sacred river Saraswatī to help him, and Nandini was saved by a miraculous rise of the waters which floated her up on to dry land. Fearing that such an accident might occur again, Vasistha appealed to Siva, who referred him to Himāchal, the lord of the Himālayas; the latter received him courteously and, having ascertained the object of his visit, called his sons together and enquired which of them would volunteer to fill up the fissure. The youngest son, Nandivardhan, offered his services, but being lame and unable to travel, said to Vasistha, "I have a good friend, a mighty snake by name Arbudha; if you petition him, he will carry me." The sage did as he was bid, and Arbudha consented to convey Nandivardhan on condition that the hill, which would stand above the abyss, was called after him. This having been agreed to, the serpent placed Nandivardhan in his hood and set out on his journey; on reaching their destination, they plunged into the chasm, but it was so deep that only the god's nose could be seen, while the snake's writhings made the earth rock. Once more Siva was appealed to for aid and, from his shrine at Benares, he extended his foot till one toe* appeared just

*The toe, or rather the toe-nail, is still shown in the temple of Achaleshwar near Achalgarh!

above the ground, and the tremor ceased entirely. The fissure was filled in, and above it arose a majestic mountain called *Ar-budha*, the hill of wisdom, after the serpent. Another legend connected with Abu has already been related at page 236 *supra*, namely to the effect that the Agniculas or Fire tribes were created at the fire-pit near Gao Mukh.

The hill was mentioned by Megasthenes (about 300 B.C.) in a passage which has been quoted by Pliny (23—79 A.D.) in his *Natural History*, where it is styled *Mons Capitalia*, or the mount of capital punishment, while Ptolemy (about 150 A.D.) calls the Arāvallis and Abu the *apocopi montes deorum poena appellati*. The word *apocopi* is of Greek origin, meaning primarily "what has been cut off" and therefore used to denote a cleft, cliff or steep place. Its Sanskrit equivalent may have been given as a name to Abu because of its having been at some time rent by an earthquake. Indeed, the *Mahābhārata* has preserved a tradition to the effect that a cleft (*chhidra*) had been made here in the earth. Such an alarming phenomenon as the cleaving of a mountain by an earthquake would naturally in superstitious times be ascribed to the anger of the gods, bent on punishing thereby some heinous crime. One of the earliest references to the people of this region is to be found in the *Vishnu Purāna* which was written in or about 1045 A.D.; the sentence runs "In the extreme west are the Saurāshtras, Suras, Abhīras, Arbudhas, etc., dwelling along the Paripatra mountains." From the various inscriptions discovered on the hill—the earliest bearing the date 671 A.D.—it would seem that the place was originally a stronghold of Saivism, and that the Jains, whose magnificent temples at Delwāra are noticed later on, did not appear on the scene till about 1032. A century and a half after this, Jainism was in the ascendant, and numerous inscriptions record the erection of shrines or the gift of images between 1230 and 1320, but Saivism then again got the upper hand and no more Jain inscriptions are met with till the fifteenth century, whence they continue till 1752.

Very little is known of the early inhabitants of Abu, and authentic history may be said to begin with the eleventh century, when the Paramāras were ruling here (at Achalgarh) and at Chandrāvati, but as vassals of the Chālukya or Solanki kings of Anhilwāra Pātan (now in the Baroda State). Dhanu was lord of Abu, and seems to have departed from his allegiance to Bhīm Deo I of Anhilwāra (1022—63) and gone over to the famous Rājā Bhoj of Mālwā (1010—55); this disaffection caused the despatch of Vimala Sāh to Abu as governor, and it was while thus employed that he built the temple which bears his name. No complete list of Dhanu's successors exists, but the following are mentioned in an inscription and probably represent all who held any real power: Dhundaka; Dhruva; Rāmadeva; Yasodhavala, a contemporary of Kumārapāla of Anhilwāra; and Dhārāvarsha. After the last named, the Paramāra dynasty of Abu and Chandrāvati gradually went to pieces and, as stated at pages *supra* 238-239, was superseded by that of the Deora Chauhāns who ruled at Achalgarh for about one

hundred years, when they transferred their capital to the town of Sirohi.

Colonel Tod, well known as the author of *The Annals of Rājasthān*, was the first European who visited the hill and, for practical purposes, he may be said to have discovered the place in June 1822; for, as he expresses it in his *Travels in Western India*, "the discovery was my own. To Abu I first assigned a local habitation and a name, when all these regions were a *terra incognita* to my countrymen." From the time of Tod's visit till 1840, the hill was used to some extent as a summer residence by the Political Superintendent of Sirohi and the officers of the old Jodhpur Legion; invalid European soldiers were sent up for the first time in 1840, encamping for the hot season only. In 1845 Rao Sheo Singh made over to the British Government certain lands for the establishment of a sanitarium, the grant being fettered by several conditions, one of which was that no kine should be killed on, or beef brought up the hill; and about the same time the Governor General's Agent made the place his headquarters.

Civil and military station.

In this way, the station has gradually grown up and may now be divided into the military and the civil portion. The barracks were originally built near the Nakhi lake, but were subsequently pulled down as the situation was feverish, and the present site, north of the civil station, was selected; they have accommodation for 160 single men and 28 families. The civil portion consists of the Residency of the Agent to the Governor General, some eighty or ninety scattered houses, the bazar, and the lines of the detachment of the 43rd (Erinpura) Regiment.

Population.

The population of the civil and military station varies and, as in other tracts similarly situated, is greater from April to June than at any other period of the year. On the 27th February 1891 the inhabitants numbered 2,585, namely 1,280 in the bazar, 1,213 in the civil station and 92 in the sanitarium, whereas on the 1st March 1901 there were 3,488 persons (bazar 1,954, civil station 1,339, and sanitarium 195), or an increase of nearly thirty-five per cent. If we include the residents of the small villages scattered about the hill, the population of Mount Abu was 4,917 in *1891* and 5,240 in *1901*, or an increase of only 6·57 per cent. during the decade. At the last census Hindus numbered 3,100, Animists 1,025, Musalmāns 698, Christians 246, Jains 109, Pārsīs 50, and Sikhs 12; the most numerous castes were Loks (1,017); Bhīls (975); Sheikhs (477); Kolīs (341); and Mahajāns (266). The Loks are peculiar to Abu and are found chiefly in the outlying villages; they are said to be descended from Rājputs by Bhīl women, and are a good-tempered, indolent and generally ill-clad and dirty people, who eke out a living partly by labour and partly by agriculture and the produce of their cattle.

Agriculture.

The culturable area is necessarily somewhat limited, but the soil is on the whole of good quality. The crops commonly grown are maize, *urd*, a coarse kind of rice (called *sā*) and some inferior millets (such as *māl*, *sāma*, etc.) in the rainy season, and a certain amount

of wheat and barley in the cold weather. Potatoes are cultivated to a considerable extent during the rains, and are sometimes exported to Abu Road and Deesa. The mode of husbandry has been described at page 260 *supra*, and it may be added that the Persian wheel is invariably used for purposes of irrigation.

The following subjects have already been dealt with, namely forests (pages 264-265); mineral resources page 265); the road from Abu to Kharāri (page 268); administrative arrangements (page 272); civil and criminal courts, notably the Abu Magistracy (pages 273 and 274); the municipality (pages 278-279); the three schools (page 281-282 and Table No. XLVIII in Vol. III-B); and the two hospitals (pages 282-283 and Table No. L). A more detailed account of the two principal educational institutions may be of interest.

Lawrence school.

The Lawrence school was founded in 1854 by Sir Henry Lawrence (the Governor General's Agent in Rājputāna from 1853 to 1857) "to provide a refuge in a good climate for the orphans and other children of soldiers, and there to give them a plain, practical education adapted to the condition of the inmates, and to train them to become useful members of society." There is accommodation for forty-eight boys and thirty-two girls, and since the school was started fifty-three years ago 951 children have been admitted. The committee of management consists of the Governor General's Agent; the Resident, Western Rājputāna States; the Superintending Engineer, Rājputāna; the Chaplain of Abu; the Commandant of the sanitarium; the Officer Commanding the Station hospital; and the Magistrate of Abu, who is Honorary Secretary. The institution is periodically visited by the Inspector of European schools, Bombay and Central India, and the staff comprises a head-master, a schoolmistress, and three assistant masters. Childern are ordinarily admitted between the ages of five and twelve, and the age for withdrawal is sixteen. The boys are encouraged to follow the profession of their fathers, and, with this end in view, a cadet company was organised some seventeen years ago and is armed with the Lee-Enfield carbine. Each boy, on reaching a certain age and size, is enrolled and takes part in drill and manœuvres like the regular soldier. The school is maintained at a cost of about Rs. 30,000 a year, nearly half of which is contributed by Government, rather more than one-fourth from private subscription, and the balance from fees and the interest on the endowment. The actual figures for 1906-07 were:—receipts Rs. 35,644 and expenditure Rs. 26,890; the balance is being spent in carrying out some much-needed alterations and additions to the school buildings. During the last seven years, the average annual cost of educating a child—including diet, clothes, etc.—has been Rs. 381, having ranged between Rs. 402 in *1902-03* and Rs. 334 in *1906-07*. The education imparted is such as should enable any fairly intelligent lad to secure, after enlistment, a first class army certificate. Instruction in type-writing and short-hand was started two years ago, and the head-master has recently introduced the teaching of somewhat advanced mathematics and practical geometry so that the boys may hereafter qualify for

admission to the Thomason Engineering College at Roorkee. All the childern are taught signalling, and the girls are exercised in calisthenics and encouraged to play lawn-tennis and other outdoor games.

High school. The Abu high school is about two and a half miles from the civil station on an excellent site known as Mars Hill. The main buildings were erected by the Bombay, Baroda and Central India Railway Company in 1887 at a cost of about a lakh and a half, and various improvements and additions have since been made. The school building has an imposing appearance with a frontage of more than four hundred feet, and can accommodate one hundred children. Originally maintained by the B. B. and C. I. Railway, the institution came under private management in 1903, and is now assisted by a grant-in-aid from Government; its future is under consideration.* The staff consists of the Principal, five qualified teachers and two matrons, and the teaching is according to the United Provinces' Code. Fair success has been attained in Government examinations, but difficulty is always experienced in getting boys to stay long enough to be prepared for the high school test. Provision exists for a special year's course in practical work for boys, *i.e.* either mechanical or office work, and, on the girls' side, for instruction in domestic arts, such as cookery, advanced plain sewing and the general care of a house. The Principal commands the cadet company already mentioned, and twenty or thirty of his boys are usually members of the same; a squad of six from this school competes yearly on the rifle range in friendly rivalry with a similar number from the Lawrence school for a challenge cup presented by a former Agent to the Governor General (Sir A. Martindale).

As already observed, Abu is the headquarters of the Governor General's Agent, as well as of the Rājputāna circle of the Imperial Public Works department; it is also included in the Nasirābād Brigade of the Mhow or 5th Division of the Southern Army. The place possesses an English church (St. Saviour's); a Roman Catholic chapel; a post office; a telegraph office; an hotel, which has recently been enlarged, if not improved; a *sarāi* or inn for travellers (called after a former Agent to the Governor General, the late Colonel J. C. Brooke); and an excellent club, to which are attached lawn-tennis courts, a cricket ground (available also for foot-ball and hockey), a racket-court, a croquet ground, etc. In another direction (to the south of the bazar) is a polo ground (Trevor Oval), with riding track and pavilion. The racket-court, polo ground, pavilion and indeed much of the present club owe their existence to the liberality of some of the chiefs of Rājputāna.

It is as the site of perhaps the most exquisite Jain buildings in the world and as a place of great sanctity (where, as they say, if you fast for but one day, all your sins are forgiven you; where

* It has since been decided to reorganise the school as one for boys only. The institution is to be supervised by a board of control consisting of Government officers, and will receive grants in-aid both from Imperial revenues and from the B. B. and C. I. Railway.

if you reside for but one year, you may become the preceptor of all mankind) that Abu is most celebrated. Tod calls the hill the Olympus of Rājasthān, the scene of contention between the ministers of Sūrya and the Titans or Daityās. The Jains claim it for Adināth, the first of their *tīrthankars* (hierarchs), the Brāhmans for Iswara or, as the local deity is styled, Achaleshwar (the immovable lord).

Temple of Arbudha Mātā or Adhar Devi.

Starting from the club and proceeding northwards, the first shrine is that of the tutelary goddess of Abu, Ambikā or, as she is here called, Arbudha* Mātā. It is a small white temple formed out of a natural cleft on the side of the hill, and is approached by a steep flight of some 450 steps through a shady grove of mango and a few *champā* trees. The shrine lies in the rock below the white temple, which is empty and is merely meant to catch the eye from a distance; this it certainly does. Traditionally, it is very old, but there is no inscription save one (dated 1575) on the jamb of a door, recording its donation.

Delwāra temples.

Less than a mile to the north are the celebrated Delwāra temples (*Devalwāra*, the place of temples), the pride and boast of the hill; the main group consists of five temples, all of which are Jain, but only four are of any particular interest, and each of them, with its subsidiary shrines and corridors, stands within its own enclosed quadrangle, as is the usual arrangement. They are constructed almost entirely of white marble, quarried (it is said) in the plains below at Jhāriwao in the south-east and brought up miles of rugged hillside by some means of which we are now altogether ignorant. The amount of ornamental detail spread over these structures in the minutely carved decoration of ceilings, pillars, doorways, panels and niches is simply marvellous, while the crisp, thin, translucent, shell-like treatment of the marble surpasses anything seen elsewhere, and some of the designs are just dreams of beauty. Amongst all this lavish display from the sculptor's chisel, two temples stand out as preëminent and specially deserving of notice and praise, namely that of Vimala Sāh (of the eleventh century) and that of the brothers Vastupāla and Tejpāla (of the thirteenth century). Both are of white marble, and carved with all the delicacy and richness of ornament which the resources of Indian art at the time of their creation could devise. "Were twenty persons," says Mr. Fergusson, "asked which of these two temples were the most beautiful, a large majority would, I think, give their vote in favour of the more modern one, which is rich and exuberant in ornament to an extent not easily conceived by one not familiar with the usual forms of Hindu architecture. The difference between the two is much the same that exists between the choir of Westminster Abbey and Henry the Seventh's chapel that stands behind it. I prefer infinitely the former, but I believe that nine-tenths of those that go over the building prefer the latter."

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* The uneducated people of the hill call her Adhar Devi, *Adhar* being a corruption of *Arbudha*.

Temple of Vimala Sāh.

The temple of Vimala* Sāh was built, as an inscription tells us, in 1032, and is sacred to Adināth. It was erected on the site of a shrine dedicated to Siva and, according to tradition, the founder purchased the land from the Paramāra ruler of the country by covering as much ground as was requisite with silver coin and paying it as the price. Tod was of opinion that, "beyond controversy," this was the "most superb of all the temples of India," and there was "not an edifice besides the Tāj Mahal that could approach to it." It consists of a shrine containing a large brazen image of Adināth with jewelled eyes and wearing a necklace of brilliants. In front is a platform which, with the shrine, is raised three steps above the surrounding court. The platform and the greater part of the court are covered by a *mandap* or portico, cruciform in plan and supported by forty-eight pillars. The eight central pillars are so arranged as to form an octagon holding up a dome which, together with its circular rims and richly-carved pendant, forms the most striking and beautiful feature of the entire composition. The whole is enclosed in an oblong courtyard, about 140 by 90 feet, surrounded by a double colonnade of smaller pillars forming porticos to a range of cells, fifty-two in number, each of which contains an image of one of the *tīrthankars*. These statues are all of one pattern and stereotyped cast of features, badly proportioned, straight-limbed and muscleless; there is nothing dignified or lifelike about them, and it is only by the symbol or *chhinha* beneath them that one can be distinguished from the other, except in the case of Pārasnāth who is always conspicuous by the serpent's multicephalous hood above him. Ambā Devī's shrine in the south-west is said to be older than the temple itself, and its position really decided the size of the court. Though forming the corner of the corridor, it stands askew to the lines of the latter, which were drawn parallel to the main temple, and its exterior moulded walls run through its masonry. The figure of the goddess is clothed in numerous skirts, and is held by pilgrims as second in importance only to the great image in the central shrine. Outside the cell is a painted representation of Bhairon, holding a freshly-severed head in his hand, his dog waiting to catch the falling drops of blood.

Externally the temple is perfectly plain, and one is totally unprepared for the splendour of the interior. At the entrance is a *hāthi-khāna* or elephant-room, in the doorway of which stands a life-size equestrian statue of Vimala Sāh, a painful stucco monstrosity "painted in a style that a sign painter in England would be ashamed of." Round the room are ten marble elephants which formerly bore riders, but the figures have nearly all been removed.

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* Vimala Sāh has already been mentioned at page 287 *supra* as governor of Abu in the time of Bhim Deo I of Anhilwāra; he was a Mahājan of the Porwāl division and a man of great wealth, which he is said to have acquired chiefly by harbouring dacoits who paid him heavily for the refuge he afforded them.

Temple of Vastupāla and Tejpāla.

Passing through a courtyard, one enters the other great temple, that of Vastupāla* and Tejpāla,* which was built in 1231 and is dedicated to Neminäth, the twenty-second of the *tīrthankars*. In the words of Tod, "the design and execution of this shrine and all its accessories are on the model of the preceding, which, however, as a whole, it surpasses. It has more simple majesty, the fluted columns sustaining the *mandap* are loftier, and the vaulted interior is fully equal to the other in richness of sculpture, and superior to it in execution, which is more free and in finer taste." Here the dome is the most striking feature. It stands on eight pillars, and is a magnificent piece of work, having a pendant, cylindrical in form and about three feet in length, which, "where it drops from the ceiling, appears like a cluster of the half-disclosed lotus, whose cups are so thin, so transparent and so accurately wrought that it fixes the eyes in admiration. Fergusson says, "it is finished with a delicacy of detail and appropriateness of ornament which is probably unsurpassed by any similar example to be found anywhere else. Those introduced by the Gothic architects in Henry the Seventh's chapel at Westminster, or at Oxford, are coarse and clumsy in comparison."

On the outer edge of the dome and arranged in a circle are sixteen female bracket figures, representing the goddesses known as the *Vidyā-devīs*. In Fergusson's woodcut† (*History of Indian and Eastern Architecture*) they are shown with only two arms each, whereas they have four; each *devī* is known by the symbols she carries, while on a few of them their names have been engraved. From this ceiling one's attention is attracted to the principal shrine where, as before, all is darkness until the light held by an attendant enables one to distinguish a colossal black image of Neminãth, with his symbol of a shell cut on the throne. Round the courtyard are thirty-nine cells containing one or more images, and some of the ceilings of the porches in front are elaborately carved. Here may be seen some curious representations, *e.g.* an army starting out, a battle, the return of the victors, and then rest at home, with the horses in their stalls, the elephant in his stable, and the cattle in their pens; or a group of people seated on the roof of a house, while a maid-servant stands at the outer gate, obviously in search of gossip; or again some weird figures, half human, half bird, with magnificent florid tails, springing not only from the caudal extremities of their bodies but in some cases from the navel. These last are *gandharvas* or celestial musicians with their pipes and cymbals, it may have been in them that Tod's imagination discovered the god Pan, for he writes:—"While my eye rested with delight on these Argosies of the Hindus, it was gratified by finding, amidst details often too mystical for a western intellect, something that savoured of a more classical Pantheon. Here, amidst a mingled crew, appeared the Greek Pan, his lower extremities goat-like, with a reed in his mouth."

* They were Porwāl Mahājans like Vimala Sāh, but contemporaries of Bhim Deo II of Anhilwāra.

† He has given an illustration of the ceiling of this temple, but calls it Vimala Sāh's.

Like its neighbour, this temple has its elephant-room which, however, is much larger, taking up one side of the court. It is enclosed by a pierced screen of open tracery, "the only one," so far as Fergusson knew, "of that age—a little rude and heavy, it must be confessed, but still a fine work of its kind." Inside the room and facing the screen are ten marble elephants which, with their trappings, knotted ropes, etc., have been sculptured with exquisite care. As in the older building, the riders have disappeared, but the slabs behind the elephants tell us who they originally were, *e.g.* Vastupāla with his two wives, Lalitā Devī and Virutā Devī, and Tejpāla with his wife Anūpama.

Other Jain temples at Delwāra.

Of the three remaining Jain temples, one lies away from the group across the road, and is not worth visiting, but the other two would in any other situation be considered as buildings deserving of attention. One is dedicated to Pārasnāth and is called the Chaumukha (or four-faced) because it has four images of the god facing the four points of the compass; the tesselated pavement is worthy of notice, the domes, though plain, are good, and the general effect is fine. The other is sacred to Adināth, and the pillars of its portico are ornamented with the well-known bell and chain decoration, so common in Jain and Buddhist structures. There were originally three cells in the enclosure; two still stand, but only the threshold of the third (on the north-eastern side) remains. The doorway of the central cell is covered with figures of the tutelary deities (*sāsnadevī*) of the *tīrthankars*, and inside the shrine are two images of Adināth and one of Pārasnāth. Both these temples are said to be about four hundred years old.

Hindu temples at Delwára.

At the back of the group of the Jain buildings at Delwāra are the remains of old Hindu temples, most of which have had to make way for their rivals; the spot is locally known as Bālam Rishiya, a corruption of Vālmīki Rishī (the sage Vālmīki), of whom there is a large figure under a ruined canopy by the side of an image of the elephant-headed god, Ganesh. The temple facing them has a long inscription dated 1395, and contains a figure of a goddess with a small image of a Rishī looking up at her. The story runs that Vālmīki, while living here, fell in love with a girl and wished to marry her; the latter's mother, after holding out for a long time, eventually consented to the match on the condition that he made a good road down the hillside to the plains between sunset and cock-crow. The sage set about his task and had nearly completed it with plenty of time to spare, when the old lady, who had been watching him throughout and could no longer bear the strain, imitated the call of a cock. Vālmīki, thinking he had failed, returned homewards and reached his hut just at dawn; he soon discovered the trick that had been played upon him and, in his wrath, cursed both mother and daughter who were promptly turned into stone. The mother he broke in pieces, and piled a heap of rocks over the fragments; the girl, whom his hasty curse had destroyed, he placed in the shrine which his statue now faces, and she is called Kunwārī Kaniyā (the

unwedded maid). Here people used to come in pilgrimage and, before worshipping, heaped stones on the mother's resting-place, cursing her as a liar and a traitor to her word. The shrine in which the girl's statue stands is curious and evidently old. The temple to the west contains a figure of Vishnu but, from the Ganesh over the door, must have once been dedicated to Siva; it has an inscription dated 1468.

Achalgarh.

About three miles north-east of Delwāra are the fort of Achalgarh, the old stronghold of the Paramāras of Chandrāvati and Abu, and the famous temple of Achaleshwar. The oldest object of interest to be seen here is the Mandākinī-kūnd*, the water of which is supposed to be as cleansing as that of the Ganges, but it, with the little old brick shrines around its margin and the famous effigies of Adipāl and the buffaloes, are all in utter ruin. The bed of the tank is dry, save for a filthy puddle or two, and presents a spectacle of terrible neglect—the accumulated neglect of many years and the gradual silting up of ages. The stone lining and steps have been displaced and pilfered, and brickmakers ply their calling in the bed and burn their bricks on the banks. The story about Adipāl and the buffaloes is as follows:—In the "good old days" the reservoir used to be kept full of *ghī* (clarified butter), which three Daityās (demons), in the shape of buffaloes, regularly devoured at night. Adipāl Paramāra accordingly lay in wait for them and slew them all with one bolt; to commemorate this deed, his statue was erected in marble, with the bow just slackened from a shot. To the south of the tank is an enclosure containing several shrines, notably that of Achaleshwar in the centre; it faces west and is a modern looking structure with portions of an old temple built into it. An object of great sanctity is the toe-nail of the god Siva (see page 286 *supra*), pointed out in a hole into which no one is allowed to put his hand. In front of the temple is a big brass *Nandi* (the bull on which Siva rides), which shows signs of rough usage and, according to the inscription on the pedestal, was made in 1408 by order of "the Rāwal" (probably Rao Sobha or Sheo Bhān). At one side of the central shrine is the *toran* or arch, from which scales used to be suspended; in these the old chiefs of Sirohi were formerly weighed against gold. South of the Achaleshwar temples is a hill, on the summit of which is the ancient fort of Achalgarh; the upper part was built by the Paramāras and added to by Rānā Kūmbha of Mewār when he took shelter here in the fifteenth century. The view from the top is very fine, but the objects of interest within the fort are few, namely two Jain temples, both much modernised; equestrian statues of Rānā Kūmbha and his son Udā or Udai Karan; and a double reservoir called Sāwan-Bhādon (August-September).

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* The Mandākinī is strictly a branch of the Ganges; the word is locally pronounced *Mandagni*, and this perhaps caused Tod to confuse this reservoir with the real *Agni-kūnd* (near Gao Mukh, south of the civil station), and to jump to the conclusion that the former, and not the latter, was the place where the fire-born Rājputs are supposed to have been brought into existence.

Uria.

Hence we retrace our steps till we regain the road and then, turning once more to the north, reach the hamlet of Uria. Here is a group of Hindu temples, undoubtedly very old and belonging to the earlier centuries, possibly before Jainism appeared on the hill. They are constructed largely of brick, and most of them are in ruins, but one is still kept up. It is dedicated to Siva under the name of Kankhaleshwar, and has a long and interesting inscription dated 1209, mentioning Bhīm Deo II, "the saviour of the Chālukya race," and Dhārāvarsha, "the lord of Chandrāvati, the feudal baron, and the only possessor of a royal umbrella."

Gurū Sikhar.

Three miles of good climbing from Uria brings one to the summit of Gurū Sikhar (the saint's pinnacle), which is 5,650 feet above the sea and 400 feet higher than any other peak on Abu. A couple of intermediate ridges have to be negotiated before the main hill can be attacked, and the path the whole way winds up through narrow defiles between rocks, cactus bushes and scrub, and over rugged boulders. When, however, the top is reached, the view is magnificent, and was thus described by Tod:—"At length Sūrya (the sun) burst forth in all his majesty, and chasing away the sable masses, the eye swept over the desert until vision was lost in the blending of the dark-blue vault with the dusky arid soil. All that was required to form the sublime was at hand, and silence confirmed the charm. If the eye, diverted from the vast abyss beneath, turned but half a circle to the right, it rested on the remains of the castle of the Paramāras, whose dusky walls refused to reflect the sunbeams; a little further to the right rose the clustering domes of Delwāra, backed by noble woods and buttressed on all sides by fantastic pinnacles, shooting like needles from the crest of the plateau, on whose surface were seen meandering several rills, pursuing their devious course over the precipitous faces of the mountain. All was contrast—the blue sky and sandy plain, the marble fanes and humble wigwams, the stately woods and rugged rocks." The cavernous weather-worn side of the summit has, with the help of masonry and a little wooden door, been formed into a small shrine to the memory of Datu Brijha, a sage whose footprints, carved upon a bench of rock within, are presided over by a row of dissolute looking *ganapatīs* (elephant-headed gods). Similar footprints, said to be those of Rāmānand (a great Vishnuite preacher of the fourteenth century) are pointed out a little further off, and down below, at the base of the rock, is a great bell, suspended to a wooden frame and having a Gujarātī inscription dated 1411.

The next place of interest lies at the other end of the mountain, about two miles south of the civil station, namely Gao Mukh, also called Vastonjī. A bridle-path leads one through pretty scenery to the crest of a hill, whence there is a tedious descent of about 500 feet by means of rudely-constructed steps, of which there must be six or seven hundred. The first object on reaching the bottom is an old tank, supplied with water from a spout shaped like a cow's head, whence the name, Gao Mukh; the tank was, according to an inscrip-

tion it bears, repaired in 1819 by one Gumān* Singh, but it is of course much older than this. Close by is the temple of Vasistha, the old Muni already mentioned at page 286 *supra*; it is a plain brick edifice, surrounded by a wall, with Vasistha's shrine in the centre of the quadrangle, and an inscription tells us that it was erected in 1337 by Mahādeo Parhi, under the patronage of Kānar Deo, son of Tej Singh, the Chauhān ruler of Chandrāvati. In front of the temple is a cenotaph containing a brass figure of Dhārāvarsha, the last of the Paramāra chiefs of these parts, who is represented as turning in an attitude of supplication to the Muni and asking to be forgiven for having doubted the truth of the story about Siva's toe (see pages 286 and 295 *supra*). The people, however, say that the statue is that of the god Indra. Numerous images, one of which is of Buddha with a rosary in his hand, and is dated 1267, will be found lying about, but perhaps the most interesting, and certainly the oldest, object is the fire-pit (*agnī-kūnd*), where the Agniculas are said to have been created (page 236); it is still carefully kept up by the Sirohi Darbār on account of its fame.

At the foot of the mountain on the south-western side and about two miles south of the dāk-bungalow at Anādra are the temples of Devāngan, or court of the gods. They are situated in the midst of a bamboo forest, in which are also some magnificent trees, and on the banks of a mountain torrent; the place itself is worth a visit on account of its natural beauty, and it requires no stretch of imagination to fancy oneself on the bank of a Welsh or Scotch stream, particularly in the cold season when the air is cool and pleasant. The shrine contains a fine image of Narsingh (the man-lion), one of the ten *avatārs* or incarnations of Vishnu. According to tradition, it was here that the ancient city of Lākhnagar once stood; the spot is marked "Kauridhai" on the Survey of India maps, but the word seems to be a mistake for Karodi Dhaj. [J. Tod, *Travels in Western India* (1839); J. Fergusson, *Picturesque illustrations of ancient architecture* (1848), and *History of Indian and eastern architecture* (1899); *India Antiquary*, Vol. II, pages 249—53; C. E. Luard, *The Delwāra temples and other antiquities of Abu* (1902); and H. Cousens, *Progress Reports of the Archæological Survey of Western India* for the years ending 30th June 1901 and 1905.]

Abu Road (also called Kharāri).— A town in the south of the Sirohi State, situated in 24° 29′ N. and 72° 47′ E. on the left bank of the western Banās river. It is a station on the Rājputāna-Mālwā Railway, 465 miles from Delhi and 425 from Bombay; it is also the terminus for the hill station of Abu, with which it is connected by a metalled road seventeen miles long. The population increased from 4,438 in *1891* to 6,661 in *1901*, or by fifty per cent.; in the year last mentioned nearly three-fifths of the inhabitants were Hindus, while Musalmāns numbered 1,914 and Christians 360. The town is the headquarters of the Abu division of the Rājputāna-Mālwā Railway

* Probably the eldest son of Rao Sheo Singh of Sirohi.

and an important trade centre, supplying the needs of the neighbouring districts of the Dānta and Idar States and of part of the Hilly Tracts of Mewār; it contains a combined post and telegraph office; a tannery and an ice factory (both private concerns); and a small hospital which is kept up partly by Government and partly from private subscriptions, and has accommodation for four in-patients. In addition, the railway authorities maintain (i) a primary school for European and Eurasian children, (ii) an anglo-vernacular high school, aided by Government, and (iii) a hospital with seven beds for their *employés*. The so-called municipal committee has been noticed at page 279. For administrative purposes the Darbār is represented by an official styled the Magistrate of Kharāri, but, as stated at pages 272-274, the Magistrate of Abu has jurisdiction in the bazar, as well as on the road from the railway station to Mount Abu, in all cases save those in which both parties are Sirohi subjects. The limestone quarries at Morthala, a few miles to the north, are the most important in the State, and are worked on the contract system.

Chandrāvati (identified by some as the *Sandrabatis* of Ptolemy). —An ancient city, said to have once been eighteen miles in circuit; the remains are to be seen about four miles south-west of Abu Road and close to the left bank of the western Banās. Tradition gives it an earlier origin than Dhār, making it the metropolis of western India when the Paramāra was the paramount lord, and its prosperity seems to have lasted from the seventh to the beginning of the fifteenth century. A list of the principal Paramāra rulers, commencing with Dhanu (a contemporary of Bhīm Deo I of Anhilwāra) and ending with Dhārāvarsha (of the thirteenth century), has been given at page 287; after Dhārāvarsha two names are mentioned—Soma Deva and Krishna Deva—but these men never possessed any real power, and the Paramāras had to make way for the Deora Chauhāns in or about 1303. By the founding of the town of Sirohi in 1405, Chandrāvati ceased to be the capital of the Deoras, and, a few years later, its buildings and skilled craftsmen were carried off to enrich the city of Ahmadābād, founded by Ahmad Shāh I of Gujarāt (1411—42). Since then, the place* has remained forsaken and desolate, and even its ruins, sold and removed as building materials, have all but disappeared. In 1824 Sir Charles Colville and his party, the first European visitors to Chandrāvati, found twenty marble edifices of different sizes. One temple to Brahmā was adorned with rich and finely executed sculptured figures and ornaments in high relief, many of the figures almost quite detached. The chief images were a three-headed male figure sitting on a car, with a woman on its knee and a large goose in front; two statues of Siva, one with twenty arms, the other with a buffalo on the left, the right foot raised and resting on a small eagle (*garud*); and a figure of death with twenty arms, one

* Tod did not actually visit the spot, but writes as follows:—"The city itself is now overgrown with jungle, its fountains and wells choked up, its temples destroyed, and the remains daily dilapidated by the Girwar chief, who sells the marble materials to any who have taste and money to buy them."

holding a human head by the hair. The best executed were the dancing nymphs, with garlands and musical instruments, many of them extremely graceful. Except the roof of the domes, whose outer marble cover was gone, the temple was white marble throughout, the lustre of the prominent parts undimmed. Close by were two richly carved columns, supporting an entablature and sculptured pediment, and probably triumphal pillars. When visited by Mr. Burgess in 1874, of the twenty buildings not more than three or four were left.

Erinpura.—A cantonment in the north-east of the Sirohi State, situated on the left bank of the Jawai river in 25° 9′ N. and 73° 4′ E., about six miles from Erinpura Road station on the Rājputāna-Mālwā Railway. For military purposes it is included in the Nasīrābād Brigade of the Mhow or 5th Division of the Southern Army. In 1901 the place contained 3,206 inhabitants, more than three-fourths of whom were Hindus. The cantonment was established in 1837, and is now the headquarters of the 43rd (Erinpura) Regiment; it consists of the regimental lines and hospital, a small bazar, an English church, a dāk-bungalow, and houses for the British officers. A brief history of the corps is given below.

By the eighth article of the treaty of 1818 the Jodhpur Darbār was bound to furnish a contingent of 1,500 horse for the service of the British Government when required, but the force thus supplied by it in 1832 proved so useless that the obligation was commuted in 1835 to an annual payment of Rs. 1,15,000 towards the maintenance of a corps which was raised by Captain Downing at Ajmer in 1836 and styled the Jodhpur Legion. It was located on the site of the present cantonment which the Commandant (the officer just mentioned) named Erinpura after the island of his birth. The Legion originally consisted of three troops of irregular cavalry, principally Musalmāns from the Delhi District, and four companies of infantry, enlisted in or about Oudh, but the strength of the infantry was subsequently increased to eight companies, to which were attached two 9-pounder guns drawn by camels, and three companies of Bhīls were added in 1841. The corps did good service in Merwāra in 1839 by assisting in breaking up a band of outlawed Thākurs of Mārwār and their followers—see Vol. I-A of this series, page 120—and it formed part of the force which occupied Jodhpur city in the same year.

On the outbreak of the Mutiny, the regiment remained staunch for a time, but in August of that year the cavalry and infantry, with the exception of the Bhīl companies, joined in the general rising. Captain Hall, the Commandant, was at Abu at the time; another officer was with a detachment at Nasīrābād; and the only Europeans at Erinpura were Lieutenant Conolly, the Adjutant, and the sergeants with their families. A company of infantry was then at Anādra on its way to Rohuā to keep in check the Thākur of that place, who was in rebellion against the Sirohi State, but, instead of proceeding to its destination, it marched up to Abu, joined its detachment of two companies there, and made an attack on the station on the 21st August. At that time there were only some

thirty or forty convalescent and sick men of the 83rd Regiment, together with a few British officers, ladies and children, on the hill, but the mutineers do not seem to have displayed any vigour. One party crept to the barracks and poured in a volley through the doors and windows, but, on the British soldiers returning the fire, one of the Legion fell and the rest ran away. Another party, under cover of the dense fog that prevailed, proceeded to Captain Hall's house and fired into it, but fortunately without inflicting any injury on the inmates. With the exception of Mr. Alexander Lawrence (son of General George Lawrence, then Agent to the Governor General for Rājputāna), who was subsequently wounded in the thigh but happily recovered, to fulfil a long and honourable career in the service of his country, there was no casualty among the defenders, and Captain Hall, with the Medical Officer of the sanitarium, and a few men of the 83rd soon succeeded in driving the mutineers down the hill. The latter went straight to Erinpura—arriving there on the 23rd August—and found that the rest of their comrades, except the Bhīls, had already mutinied; they proceeded to plunder and burn the station, and, having allowed the European sergeants and their families to depart, set out towards Ajmer, intending to attack that place. They took Lieutenant Conolly with them for three marches, but two *sowārs* (Abbās Alī and Elāhi Bakhsh), who had been placed as guard over this officer, found an opportunity of getting him away and rode back with him to Erinpura; as a reward for this act of devotion and fidelity, these two men subsequently received commissions as *Jemadārs.* Some of the mutineers continued their march towards Delhi, and were later on broken up and dispersed by a force under Brigadier Gerrard in the Shekhāwati district of Jaipur; the others entered the service of the Thākur of Awā, a powerful noble of Jodhpur, who, being disaffected towards his own chief, took this opportunity of openly rebelling.

Shortly after the Mutiny a new corps was raised, with the three Bhīl companies of the old Legion as a nucleus, and on the 12th June 1860 it was gazetted as the Erinpura Irregular Force. It was composed of a squadron of cavalry, mainly Sikhs, numbering 164 of all ranks, and eight companies of infantry numbering 712; the latter were mostly Bhīls and Mīnās, the object being to afford occupation to the local tribes and thus wean them from their lawless habits. From the end of 1870 to 1881 the Commandant was in political charge of Sirohi, and detachments were on several occasions sent out to assist the local police in patrolling disturbed tracts, overawing outlaw Thākurs, and arresting dacoits. For example, a small force proceeded against the Thākur of Bhatāna in 1868, but he was not captured; in 1870-71 the greater portion of the regiment was employed on the Sirohi-Mārwār border, where it had disagreeable outpost and patrol duties, all efficiently performed. In April 1872 a detachment made an unexpected night attack on the village of Rewāra, surprised the rebellious Thākur, and carried him off to Erinpura; on this same occasion fifty-two Mīnā thieves were captured, and four who resisted were killed. At the commencement of the rains of 1882 another night

march (on the village of Alpa, eight miles to the west of the cantonment) resulted in the arrest of seven famous dacoits, besides some fifty other men charged with minor offences. Lastly, in 1883, a portion of the regiment formed part of the Bīkaner Field Force, directed from Nasīrābād under the late General Gillespie against certain recalcitrant nobles of that State.

In 1895 the strength of the squadron was reduced from 164 to 100 of all ranks, and in 1897 the force, which had till then been under the Foreign Department of the Government of India, was placed under the Commander-in-Chief; lastly, in October 1903 it was renamed the 43rd (Erinpura) Regiment. At the present time, the squadron* consists of Sikhs and Musalmāns from the Punjab, while the infantry is mainly composed of Mīnās, Mers, Rājputs and Musalmāns. With the consent of the Mahārao of Sirohi, certain British enactments, such as the Indian Penal Code, Civil and Criminal Procedure Codes, etc., were extended to the cantonment in 1890-91, and the Commandant has the same sort of jurisdiction as the Magistrate of Abu, leaving the Darbār to deal with such residents of the bazar as are purely Sirohi subjects.

Sheoganj.—A town in the north-east of the Sirohi State, situated on the left bank of the Jawai river and adjoining the cantonment of Erinpura, whence it derives such importance as it possesses. The population increased from 1,607 in *1891* to 4,361 in *1901*. The town takes its name from Rao Sheo Singh, by whom it was founded in 1854; it has no architectural beauty, the houses being for the most part substantial brick buildings of the plainest design, but the principal street is wide, with rows of well-grown *nīm* trees (*Azadirachta indica*) running from end to end. The place is one of the chief trade centres of the State, and supplies the needs of the cantonment and the adjoining villages of Jodhpur. The natural drainage is fairly good, and a so-called municipal committee looks after the sanitary arrangements; its efforts in the past were not always successful, and complaints from the military authorities were common, but matters have much improved during the last three years. The town contains an elementary indigenous school and a hospital with accommodation for twelve in-patients.

Sirohi Town.—The capital of the State and the headquarters of the *tahsīl* of the same name, situated in 24° 53′ N. and 72° 53′ E. about sixteen miles north-west of Pindwāra station on the Rājputāna-Mālwā Railway; it lies close to the Agra-Ahmadābād road, and is twenty-eight miles from Abu. The population increased from 5,699 in *1881* to 6,207 in *1891*, and then fell to 5,651 in *1901*; at the last enumeration more than seventy-three per cent. of the inhabitants were Hindus and seventeen per cent. Jains. The town is said to take its name from the Saranwa hill, on the western slope of which it stands; it was built by Rao Sains Mal in 1425, taking the place of the old capital—a little further to the east and also called

* It is proposed to abolish this squadron, or rather to transfer it to a new regiment of cavalry, shortly to be raised.

Sirohi—which was founded by Rao Sobha in 1405 and was subsequently abandoned as the site was found unhealthy. The Mahārao's palace, which has been considerably enlarged during recent years, is picturesquely situated on the hillside and overlooks the town. There are no less than sixteen Jain temples, but the only one of any interest is that of Chaumukhjī which was built, as the inscription tells us, in 1577; the Hindu temples, four or five in number, call for no special comment. The sword-blades, daggers, bows, etc., manufactured here and the work of inlaying with gold and silver on iron have been noticed at pages 265-266 *supra*, but there is not much demand for these articles nowadays, and the industry is declining. The place is naturally well-drained and healthy, although hot at certain seasons on account of its position under the hill, whereby the breeze is shut out; it has a good and abundant water-supply from both wells and tanks. Sirohi possesses a combined post and telegraph office; a school in which Urdu, Hindī and English are taught up to the Middle standard; several educational institutions of the indigenous type; a well-arranged jail which has accommodation for 135 prisoners; the Crosthwaite hospital with beds for twenty-four in-patients; and a small dispensary attached to the palace.

About two miles north by north-east and on the slope of the same range of hills as the capital is the shrine of Saraneshwar, the tutelary deity of the chiefs of Sirohi. It is believed to have been built about five hundred years ago, and stands in the centre of a fortified walled enclosure, erected by one of the Musalmān kings of Mālwā who is said to have been cured of a leprous disease by bathing in a *kūnd* or fountain close by. The temple is of marble, faces the west, is dedicated to Siva, and contains the usual phallic emblem (*lingam*). It consists of a shrine, hall and porch; the exterior of the two last is carved, but the work is all modern, finished about two hundred years ago. The hall is decorated with a perforated screen, and the central area is covered with a dome, adorned with the usual pendant ornament, and with twelve brackets round it, supporting as many female dancing figures. Round the dome, and enclosing it against bats and birds, is an iron grating or cage. The entrance of the temple is guarded by two colossal stone elephants, and outside is a large *trisūla* or trident, about twelve feet in height and said to be composed of seven metals. On the plain below are the cenotaphs of the chiefs of Sirohi, but none of them is remarkable for architectural beauty. The position of the temple close to the crematorium explains, it is believed, the epithet Saraneshwar; this word means "the lord of ashees" and is probably derived from *sarana*, signifying "a funeral pyre." The fane is as sacred in Sirohi as is that of Eklingjī in Udaipur.

Vasantgarh.—An old fort, situated on a hill about five miles south of Pindwāra railway station and surrounded by ramparts of undressed stone and rubble, extending from north-west to south-east for at least a mile and a half. The temples and inscriptions found here leave no doubt that the place is of great antiquity. To the west of the fort and perched on a hillock is the small shrine of Khimel

Mātā, where an inscription dated 625 A. D. was found. It tells us that, while Rājjila, a feudatory of Rājā Varmalāt (or Charmalāt) and ruler of the territory round about Abu, was reigning at *Vatakara or Vata, i.e.*, Vasantgarh, a temple to the goddess Kshemaryā was erected by a trader of the name of Satyadeva at the direction of the town council; there can be little doubt that the Kshemaryā of this inscription is Khimel Mātā, near whose shrine the stone was discovered. Near the foot of the hill on which the fort stands is a group of temples which are well-nigh destroyed; the central one appears to have been dedicated to Siva and is in a fair state of preservation, but the others are almost total wrecks. A little to the north-west is an old step-well, where an inscription* of the time of Pūrna Pāl was found, and on the other side of the well, in a small *chhatri*, is an image of *Sesh Shayya Nārāyana* with Brahmā being born from his navel. The inscription* records that the well, which was called Saraswatī, was repaired and restored in 1042 by Lahinī, the widowed sister of the Paramāra king Pūrnapāla who was ruling at *Vatapura* (Vasantgarh). To the north-east of the Sivaite temple above referred to are the remains of one to Brahmā, which is certainly not later than the seventh century; the shrine contains a standing life-size image of the god, with three faces and a nimbus behind them, but with only two hands holding a rosary and a water-pitcher. In the vicinity is a cluster of ruined temples inside a courtyard; the principal is dedicated to Sūrya—at least it is thought so, as there is a figure of the sun on the gateway of the enclosure—and is of about the same age as that of Brahmā. These are, it is believed, the oldest remains at Vasantgarh. Further to the east stands a Jain temple of the fifteenth century, in which is an image with an inscription telling us that it was installed at *Vasantapura* in the reign of Kūmbhakarna† in 1450. Excavations carried out some years ago brought to light the existence of certain brass images under the hall; they were presented by the Mahārao to the Jains of Pindwāra, by whom they were placed in the temple to Mahāvīra there. Most of these images are undoubtedly old, and one of Rakhabhnāth has an inscription dated 744 which, if referred to the *Vikrama* era, is equivalent to A.D. 687.

From the above account it will be seen that Vasantgarh is a very ancient place. Up to the end of the eleventh century it was known by the name *Vata*, *Vatakara* and *Vatapura*, but in the fifteenth century it was called *Vasantapura*, which is the same as the modern *Vasantgarh* except that in the one it is called a city (*pura*) and in the other a fort (*garh*). It is clear from the inscription found near Khimel Mātā's temple that the city was in existence long before the first half of the seventh century, and the Rājā Varmalāt (or Charmalāt)

* The inscription was published in the *Journal of the Bengal Asiatic Society*, Vol. X, and the stone was then thrown by the Bhils into this well, whence it was rescued a few years ago; it is now at Sirohi, as is the inscribed stone found near Khimel Mātā's shrine.

† The great Rānā Kūmbha of Mewār (1433—68).

mentioned therein, was perhaps the paramount sovereign of western Rājputāna who ruled at Bhīnmāl, a town now in the Jaswantpura district of Jodhpur and the *Pi-lo-mi-lo* of the Chinese pilgrim Hiuen Tsiang (629-45). Nothing further is known of Vasantgarh till 1042, when it was the capital of a Paramāra king of the name of Pūrna Pāl. From the inscription of Lahinī's well we, however, learn that the country of *Vata* was formerly governed by Bhavagupta, who was one of the predecessors of Vigraharājā, the deceased husband of Lahinī. A third inscription informs us that in the middle of the fifteenth century *Vasantapura* was in the dominions of the Guhila (Gahlot) king Kūmbhakarna.

The place was, it is believed, called *Vata* because it abounded with *vata* or banian trees which, as a matter of fact, are still fairly numerous, though many died during the famine of 1899-1900. Lahinī's inscription confirms this view by telling us that in days of yore the country was a mere forest, and that under the *nyagrodha* or banian trees there stood the sacrificial hermitage of Vasistha. There, in the jungle, Vasistha erected temples to *Arka* and *Bharga* and, with the aid of the architect of the gods, founded a city called *Vata*, adorned with ramparts, orchards, tanks and lofty mansions. The temples to *Arka* and *Bharga* are those of Sūrya and Brahmā (mentioned above), and the fact that they are represented to have been constructed by Vasistha shows that they were regarded as of very early age, even in 1042 A.D. The inscription further says that the temple to the sun was originally built by *Vasisthapuras* (the people of the city of Vasistha) but, becoming dilapidated in the time of Pūrna Pāl, was repaired by his sister Lahinī; this perhaps refers to the *sikhara* or spire, which seems to be later than the rest of the structure.

[*Progress Report of the Archæological Survey of Western India* for the months July 1905 to March 1906, inclusive.]

BIBLIOGRAPHY.

J. BRIGGS.—*History of the rise of the Muhammadan power*, London, 1829.

J. TOD.—*Annals and antiquities of Rājasthān*, London, 1829—32.

J. MALCOLM.—*Memoir of Central India including Mālwā*, London, 1832.

J. SUTHERLAND.—*Sketches of the relations subsisting between the British Government in India and the different Native States*, Calcutta, 1837.

J. TOD.—*Travels in Western India*, London, 1839.

J. FERGUSSON.—*Picturesque illustrations of ancient architecture in Hindustān*, London, 1848.

Rājputāna Agency administration reports, annually from 1865-66.

H. M. ELLIOT.—*History of India—Muhammadan period*, Vols. II and V. London, 1869 and 1873.

A. CUNNINGHAM.—*Ancient geography of India*, London, 1871.

Reports on Dispensaries, Jails and Vaccination in Rājputāna, annually from 1872-73.

G. B. MALLESON.—*Native States of India*, London, 1875.

Rājputāna Gazetteer, Vol. I, Calcutta, 1879, and Vol. III, Simla, 1880.

The Indian Antiquary, Vols. II, VI and XIII.

Bombay Gazetteer, Vol. V, Bombay, 1880.

Rājputāna Census Reports, 1881, 1891 *and* 1901.

E. C. BAYLEY.—*Local Muhammadan dynasties—Gujarāt*, London, 1886.

Great Trigonometrical Survey of India, Vols. VII. A and XXX, Dehra Dūn, 1887 and 1892.

Administration reports of the Sirohi State, annually from 1889-90.

MISS MACADAM.—*List of trees and plants of Mount Abu*, Jodhpur, 1890.

C. U. AITCHISON.—*Collection of treaties, engagements, and sanads*, Vol. III, Calcutta, 1892 (under revision).

W. W. WEBB.—*Currencies of the Hindu States of Rājputāna*, Westminster, 1893.

C. M. DUFF.—*Chronology of India*, Westminster, 1899.

J. M. MACPHERSON.—*British enactments in force in Native States, Rājputāna*, Calcutta, 1899.

A. ADAMS.—*The Western Rājputāna States*, London, 1899.

J. Fergusson.—*History of Indian and eastern architecture*, London, 1899.

T. H. Hendley.—*General medical history of Rājputāna*, Calcutta, 1900.

Report on the Famine in Rājputāna in 1899-1900, Ajmer, 1901.

H. Cousens.—*Progress reports of the Archæological Survey of Western India*, for the years ending 30th June 1901 and 1905, and for the months July 1905 to March 1906, inclusive.

R. A. Cole.—*Short account of the Erinpura Irregular Force*, Simla, 1902.

C. E. Luard.—*The Delwāra temples and other antiquities of Abu*, Bombay, 1902.

Review of famine relief operations in Rājputāna in 1901-02, Ajmer, 1903.

Chiefs and leading families in Rājputāna, Calcutta, 1903.

S. S. Jacob and F. Manners Smith.—*Report on irrigation in the Sirohi State*, Ajmer, 1904.

G. H. Trevor.—*A chapter of the Indian Mutiny, Rājputāna, in* 1857-58, London, 1905.

B. B. Paymaster and E. C. Maddock.—*Medico-topographical account of the Erinpura Regiment*, Calcutta, 1907.

Report of the Abu Lawrence school for soldiers' children for the year 1906-07, Bombay, 1907.

PART IV.

BIKANER STATE.

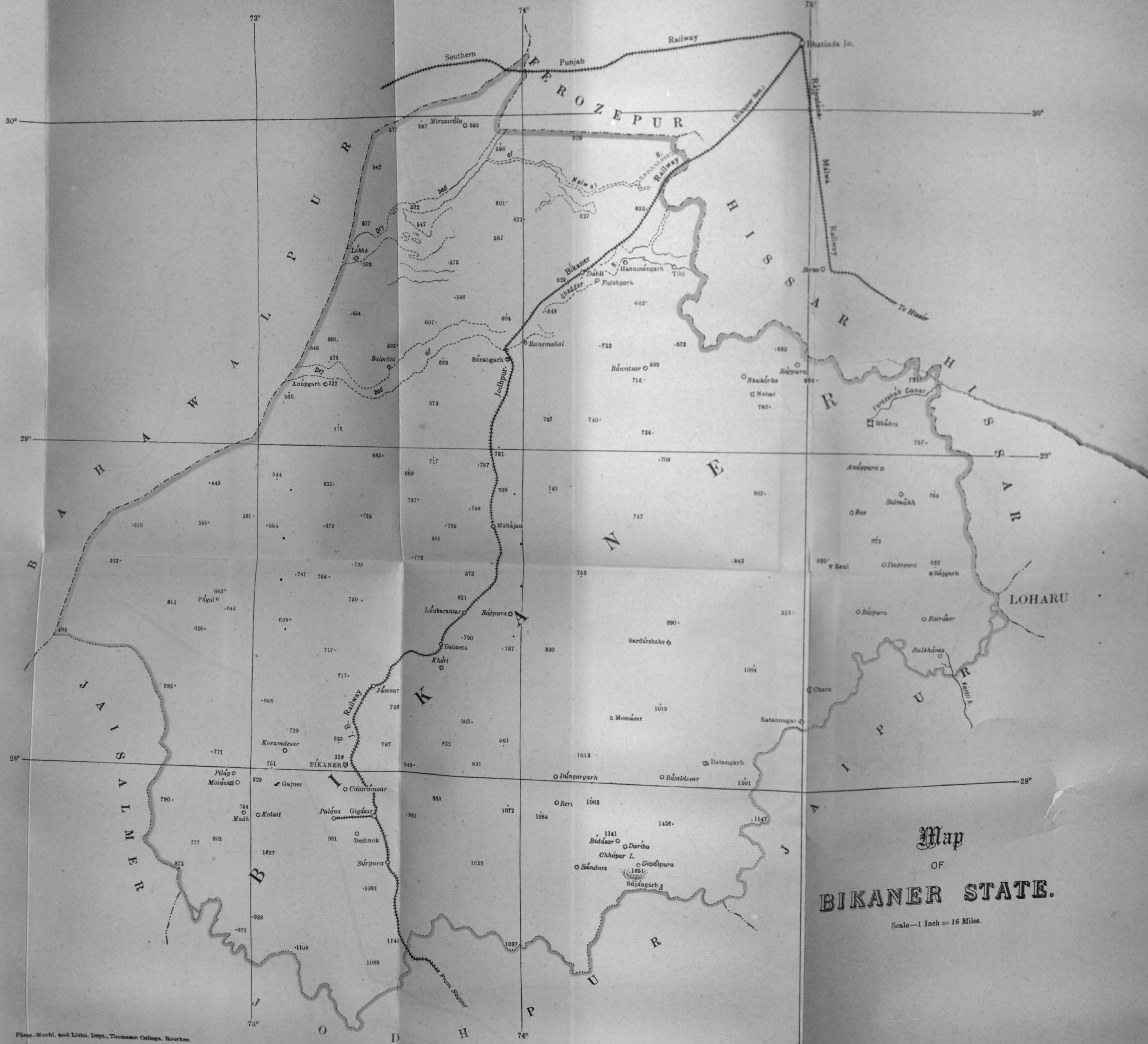


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Zinco., October, 1907.— No. 3312— 350.

BIKANER STATE.

CHAPTER I.

PHYSICAL ASPECTS.

Position, area and boundaries.

Bīkaner is the northernmost and the second largest State in Rājputāna, having an area of 23,311 square miles, and lying between the parallels of 27°12′ and 30°12′ north latitude and 72°12′ and 75°41′ east longitude. It is bounded on the north and west by Bahāwalpur; on the south-west by Jaisalmer; on the south by Jodhpur (or Mārwār); on the south-east by the Shekhāwati district of Jaipur; on the east by Lohāru and Hissār; and on the north-east by Ferozepore (Fīrozpur).

Derivation of name.

The State takes its name from its capital, the city of Bīkaner, *i.e.* the settlement or habitation (*ner*) founded by Rao Bīka in 1488; others say that the spot on which the city stands was the birthright of a Jāt called Naira or Nera, who only gave it up on the condition that his name was linked with that of Bīka, and hence the word *Bīka-ner*.

Configuration and hill system.

The southern and eastern portions of the territory form part of the vast sandy tract known as the Bāgar; the north-west and part of the north lie within the great Indian desert, while the north-eastern corner is the least unfertile section, being in favourable years flooded by the Ghaggar. The surface of the country is for the most part covered with undulating sand-hills, varying in height from twenty to over one hundred feet with the force and direction of the wind; the slopes of these dunes suggest the ribbed appearance of the sea-shore, and their consistence is frequently so loose that men and animals, stepping off the beaten track, sink as if in snow. The general aspect is dreary and desolate in the extreme. Elphinstone, who passed through in 1808 on his way to Kābul, wrote that, within a short distance of the capital, the tract was as waste as the wildest parts of Arabia; but, during and just after the rains, it wears a very different appearance, becoming a vast green pasture-land covered with the richest and most succulent grasses. The only rocky hills deserving the name are in the south close to the borders of Jodhpur and Jaipur, and the highest of them, near Gopālpura, is but 1,651 feet above the sea or about six or seven hundred above the level of the surrounding plain.

River system.

There are no perennial rivers or streams. The Kāntli or Kātli rises in the hills near Khandela (in the Jaipur State) and, after a northerly course of some sixty miles through Shekhāwati, generally loses itself in the sand just within the Bīkaner border; in years of

good rainfall, however, it flows for from ten to sixteen miles (according to the nature of the flood) in the south of the Rājgarh *tahsīl* and benefits a few villages. The Ghaggar rises in the lower slopes of the Himālayas in the State of Sirmūr in 30°4′ N. and 77°14′ E. and, after traversing Patiāla and the Hissār District, enters Bīkaner in the north-east near Tibi; it once flowed through the northern part of the State and joined the Indus—the bed of the old channel being still traceable—but it is now dry except in the rains, and even then water is rarely found more than a mile or two west of Hanumāngarh. By the construction in 1897, at the joint expense of the Government of India and the Darbār, of a weir at Otu at the lower end of the Dhanūr *jhīl* (about eight miles west of Sirsa), the water of the Ghaggar is now utilised for feeding two canals which form the most important irrigation works of the State.

Lakes. Two salt-lakes exist, one at Chhāpar in the south near Sūjāngarh, and the other at Lūnkaransar about fifty miles north-east of the capital; both are small, and the latter only is worked now. Of fresh-water lakes, the most notable is that at Gajner, nineteen miles south-west of Bīkaner city, where the Mahārājā has a palace, shooting-box and garden; it is formed by the drainage from the rocky country to the west, and is about half a mile in length and a quarter of a mile in breadth. Ten miles to the south-west, at Kolait, a sacred spot, is a somewhat smaller tank, on the banks of which are numerous bathing *ghāts*. Both of the above are dependent for their water-supply on the rains, and dry up when, as is not infrequently the case, the fall is small.

Geology. Nearly the whole of the State is covered with blown sand which has been driven up from the Rann of Cutch by the prevailing south-west winds; the sand-hills are of the transverse type with their longer axes at right angles to the direction of the wind. Nummulitic rocks, limestones and clays crop out from beneath the sands at Gajner and Kolait, and are found in wells. A lignite of dark brown colour, with included lumps of fossil resin, occurs in association with these rocks at Palāna (about fourteen miles south of the capital), and fuller's earth (*Multāni mitti*) is found in the same formation at Madh further to the west. At Dalmera, forty-two miles north-east of Bīkaner city, there is a small outcrop of Vindhyan sandstone which is quarried for building purposes, while a copper mine was discovered at Bīdāsar in the south in the middle of the eighteenth century but has not been worked for many years. Superficial deposits of gypsum are found in various parts, and the mineral is used as a cement for lining wells.

Botany. Bīkaner possesses no forests, and, for want of water, trees are scarce. The commonest is the *khejrā* (*Prosopis spicigera*), the pods, bark and leaves of which are eaten by cattle and, in times of famine, by the poor; next come the *jhāl* (*Salvadora oleoides*) and the *khair* (*Acacia catechu*). The *babūl* (*Acacia arabica*) is found on the sand-hills, and there is an extensive belt of them—about ten miles in length and from two to four in breadth—along the dry bed of the

Ghaggar near Hanumāngarh. A few *shīsham* (*Dalbergia sissoo*) trees grow spontaneously in the neighbourhood of Sūjāngarh, and there are plantations of *ber* (*Zizyphus jujuba*), *nīm* (*Azadirachta indica*) and other varieties at the capital. The best timber produced is that of the *rohīra* (*Tecoma undulata*). Of bushes, the most common is the *phog* (*Calligonum polygonoides*); its twigs and roots are used to support the sides of wells and supply materials for huts, while its buds are eaten with buttermilk and condiments by the poor, and its leaves by camels. The *sajjī* (*Salsola griffithii*) is an important and valuable plant which grows plentifully in the firm soil north of the Ghaggar and in the south-west of the Anūpgarh *sub-tahsīl*; when burnt, it yields an impure carbonate of soda, used in washing and dyeing cloth. The *lānā* (*Haloxylon salicornicum*), a shrub of the same species but of a darker colour, is generally found in conjunction with *sajjī*, but the soda obtained from it is of inferior quality. Others deserving of mention are the flowering *āk* or *ākrā* (*Calotropis procera*), the pride of the desert; the well-known jungle caper, the *karel* (*Capparis aphylla*), useful as food; and two spurges called *thor* (*Euphorbia neriifolia* and *E. royleana*), which form efficient hedge-rows and supply a juice used by the people as a medicine. The large number of excellent fodder grasses for which Bīkaner is famous make the country, in years of good or even fair rainfall, one of the best grazing-grounds in India. Among them are *bharūt* (*Cenchrus catharticus*), most abundant in the southern half of the State and valuable because it is brought out by a few early showers, is often plentiful in years of scarcity and its seed makes fair bread when ground; *sāwan* (*Eleusine flagellifera*), a rather tall grass and good for sheep; *dhāman* (*Pennisetum cenchroides*), common in the north and specially favoured by cattle; and two varieties locally known as *gānthil* and *kiu*, the first of which is described as the finest of all, while the other is not far behind it as regards quality and is found on the banks of the Chhāpar lake.

The fauna is not very varied. In olden days the wild ass or *gūrkhar* (*Equus onager*) was found sparingly here, but it has not been seen for many years. The herd apparently consisted at the most of about 150 head, which "frequented an oasis a little elevated above the surrounding desert, and commanding an extensive view around." In Bīkaner, the animals were hunted in the following manner as described by Jerdon in his *Mammals of India*:—"Once only in the year, when the foals are young, a party of five or six native hunters, mounted on hardy Sind mares, chase down as many foals as they succeed in tiring, which lie down when utterly fatigued, and suffer themselves to be bound and carried off. In general they refuse sustenance at first, and about one-third only of those taken are reared; but these command high prices, and find a ready sale with the native princes. The profits are shared by the party, who do not attempt a second chase in the same year lest they should scare the herd from the district, as these men regard the sale of a few *gūrkhars* annually as a regular source of subsistence." Another writer, Assistant Surgeon Fauna.

R. H. Irvine,* mentions the existence of "a small sort of tiger with smooth head, yellow skin and dark hairs mixed, with neither stripes nor spots (like the South American cagonar ?)." It is difficult to say what animal is referred to, but if " cagonar " is a misprint for " cougar " or " couguar,' it would seem to be the lynx which, like the wild ass, has disappeared.

At the present time, the ravine deer (*chikāra*) is fairly common every where, and hyænas and wolves are not altogether rare ; there are fine herds of black buck in the north, where, as also in the eastern districts, the *nīlgai* (*Boselaphus tragocamelus*) is sometimes met with. Wild hogs are plentiful in the bed of the Ghaggar near Hanumāngarh, and there are sanctuaries for them at Gajner and near the capital. Among small game may be mentioned the hare ; the partridge (of the grey variety only) ; the florican (rare and practically confined to the north) ; the great Indian bustard or *gurāhn* (*Eupodotis Edwardsi*) ; the lesser bustard or *houbāra*—also called *tilor*-(*Houbara Macqueeni*) ; wild duck and teal (on the tanks and marshes in the winter) ; and several species of sand-grouse, such as the large or black-bellied or imperial (*Pterocles arenarius*), the common (*P. exustus*), the spotted (*P. senegalus*), and the pin-tailed (*P. alchata*). The State is famous for its imperial sand-grouse, of which, in a good year, enormous bags can be made. At Gajner on the 23rd November 1904 Sir Philip Grey Egerton secured no less than 305† (besides a duck and a small grouse) to his own gun in about three hours, while on the 24th November 1906 a party of fourteen, including Their Excellencies the Earl and Countess of Minto, shooting at Gajner and three small tanks in the vicinity, accounted for 2,270 (including 111 small sand-grouse), the Viceroy heading the list with 270 birds.

Climate and temperature.

The climate is dry and generally healthy, though characterised by extraordinary extremes of temperature. During the summer the heat is intense ; hot winds blow with great fury in May, June and part of July, heavy sand-storms are of common occurrence, and the sun is so powerful that even the people of the country fear to travel in the middle of the day. On the other hand, severe cold is experienced in the winter, and trees and vegetation are not infrequently injured by the frost. Proceeding to the capital at the beginning of November 1808, Elphinstone's Mission suffered great mortality ; thirty sepoys, without reckoning followers, were taken ill in the course of one day at Nathūsar, and forty persons of all descriptions expired during the first week of the halt at Bīkaner. Boileau (in 1835) also found the weather bitterly cold in the winter, and even in the beginning of February ice formed in considerable quan-

* Author of *Some account of the general and medical topography of Ajmer*—a work which is undated but was apparently published in 1839 or 1840.

† His Highness the Mahārājā has set up a new record which is not likely to be beaten. Shooting at the Pilāp tank on the 16th December 1907 for barely 2 ¼ hours, he brought down no less than 475 imperial grouse and a duck, and fired off 1,175 cartridges. On the same occasion, the writer shot 291 birds (276 imperial mall grouse,rouse) and four ducks), while two other guns accounted for 58 (all imperial gdansl1 between them. The total bag was thus 825.

tities on the ponds, while the different vessels of water in his camp were completely frozen; but on the 9th May the temperature was 120° at noon, 123° at 1 P.M., 119° at 2 P.M. and 116° at 3 P.M. in the same tent, yet, under this great heat, the air was not found unhealthy, and there was not a sick man in camp. A comparison with the effects of the season encountered by Elphinstone would seem to show that the more sultry is the more healthy part of the year.

A meteorological observatory was established at Bīkaner city in or about 1877-78, and more or less continuous statistics are available from 1880. The mean temperature is about 81°, varying from rather more than 60° in January to 95° in May, and the mean daily range is 24° (18° in July and between 25° and 26° in November); similarly the mean maximum and minimum are respectively about 92·5° and 69°. The highest temperature recorded at the observatory was 119·8° in 1897, and the lowest 31·1° in 1905. Some further details will be found in Tables Nos. LI and LII in Vol. III-B; the figures have been kindly supplied by the Meteorological Reporter to the Government of India.

Rainfall.

The average annual rainfall at the capital during the twenty-six years ending 1905 was just under ten inches—see Table No. LIII—and, of this amount, 3·04 inches are usually received in July, 2·63 in August, 1·28 in June, and 1·15 in September. The actual fall has ranged between 18·84 * inches in 1892 and 1·14 in 1899, and five inches have been registered on a single day (30th August 1874). In the rest of the territory the rainfall varies from less than six inches in the west to more than fourteen in the east and south-east; the heaviest fall in any one year was nearly forty-five inches at Churu (in the south-east) in 1892, while in 1885 Anūpgarh (on the western border) and Hanumāngarh (in the north-east) received less than half an inch each.

Earthquakes and storms.

There is no record of earthquakes, but as already stated, sandstorms are very common and occasionally cause damage. For example, a storm which occurred on 3rd June 1877 was described as the heaviest known for twenty years, and the roofs of many houses suffered.

* I should explain that these figures are taken from the official publication entitled *Rainfall Data of India*, whereas, according to the local records, 20·02 inches fell in 1892. Assuming the former to be correct, it remained the record till the past year (1907), when 19·51 inches were registered at Bikaner city—see Table No. LIII in vol. III-B although not a drop of rain fell after the 24th August.

CHAPTER II.

HISTORY.

Genealogy.

The chiefs of Bīkaner belong to the Rāthor clan of Rājputs, of which the Mahārājā of Jodhpur is the head, and claim descent from Rao Jodha who ruled first at Mandor and next at Jodhpur, founding the latter city in 1459. The earlier history of the Rāthors has already been given at pages 52—54 *supra* and need not be repeated.

Rao Bīka.

Of Jodha's numerous sons, Bīka was the sixth (born in 1439) and Bīda the twelfth, and their mother belonged to the Sānkla branch of the Paramāra Rājputs. Nothing is related of Bīka until he started on that enterprise which was to give permanence to his name and family, and which is said to have originated in a casual remark made at a *darbār* by his father. On the occasion in question, Bīka arrived late and took his seat beside his uncle Kāndhal, with whom he carried on a whispered conversation. Rao Jodha jestingly observed that they must be scheming the conquest of some new territory—an idea which was no doubt constantly suggested to him by the necessity of having to provide for a large family—whereupon Kāndhal, treating the joke as a challenge, stood up and announced that he felt pledged to win fresh lands. A Sānkla Rājput, who happened to be present, pointed out that the country to the north had been abandoned by his clansmen, weakened by losses in war, and suggested its occupation. The proposal met with general approval, and accordingly in 1465 Bīka, accompanied by his uncle Kāndhal, his brother Bīda, and others of less repute, together with about one hundred horsemen and five hundred foot-soldiers, set forth to conquer the territory now known as *Bīkaner*.

Bīka leaves Jodhpur, 1465.

According to Cunningham, the tract was originally called *Bāgardes*, the land of the Bāgris or warriors, whose leader was Bāgri Rao, but, at the time of which we are writing, it was parcelled out among numerous clans and tribes. Thus the Bhāti Rājputs were ruling in the north and west, while in the east, north-east and south-east were the settlements of independent Jāts; beyond the latter, in the vicinity of Bhatner (now called Hanumāngarh), were the Bhattis or Bhāti Rājputs converted to Islām, as well as the Chāyals and Johiyas who were chiefly, if not entirely, Muhammadans; Hissār was occupied by the Delhi king's *Sūbahdār*, and Shekhāwati (now part of Jaipur) by the Kaimkhānis; the present Sūjāngarh *tahsīl* in the south-east was in the possession of the Mohils, a branch of the Chauhāns, and that of Reni in the east was held by Chāyal and Khīchī Rājputs.

Hither came the Rāthors nearly 450 years ago and, like the Danites of old, "sought them an inheritance to dwell in." They appear to have been first opposed by the Bhātis in the west but, by marrying the daughter of the Rao of Pūgal—whose descendant is one of the principal nobles of the State at the present time—Bīka allied himself with the most powerful Bhāti family in that region; he next built a fort at Koramdesar (about eight miles north of Gajner) and gradually augmented his conquests from the neighbourhood. The party soon came into contact with the Jāts who had for ages been established in these arid abodes and were constantly quarrelling with each other; the most influential clan of this tribe was that of the Godāras who, for various reasons, determined to conciliate the invader. Accordingly, they voluntarily acknowledged the sovereignty of Bīka on certain conditions accepted by the latter, who further bound his successors to receive the *tīka* of inauguration from the hands of the descendants of the head of this clan, and to this day a descendant of Pāndu (who was then the *chaudhri* or headman of the Godāras) "applies the unguent of royalty" to the forehead of each new chief of Bīkaner. Subsequently, the rest of the Jāts were subdued, and in 1485 Bīka founded the small fort at the capital, which still bears his name, while the building of the city itself was begun in 1488. About this time also, the lands of the Khīchīs and Mohils were annexed, together with some villages wrested from the Baluchis in the Sind direction and from the Kaimkhānis of Shekhāwati in the south-east.

Bīkaner city founded, 1488.

Rao Bīka having been thus firmly established, his uncle Kāndhal, to whose spirit of enterprise he was largely indebted for success, journeyed to the north and north-east and ravaged Hissār, but met his death in an encounter with Sārang Khān, the *Sūbahdār* of the district, in 1490. Bīka vowed vengeance and, in a battle fought at the village of Kāns, Sārang Khān was killed, but the losses on both sides were heavy and included one of the Rao's sons. Soon after, when Sūja was chief of Mārwār, Bīka claimed the family heirlooms, which had been brought from Kanauj at the end of the twelfth century, on the ground that they had been promised to him by his father, and, as he failed to get possession of them, he marched against Jodhpur, took the city, plundered it for six hours, and invested the fort. Eventually the quarrel was patched up, and Bīka returned to his capital with the Kanauj relics, such as the throne, the umbrella, the *chaorīs* (fly-whisks), the dagger, the old cooking cauldrons, the *bairisāl* or foe-frightening kettledrum, the *sāligrām* stone, and eighteen-armed image of Devī, etc. His next exploit was against Khandela (in Jaipur), the Thākur of which place had plundered in his territory; he sacked the town and obtained much spoil. Thereafter he ruled in peace till his death in 1504, when his seven wives became *satī*, that is to say, were burnt with him; his territory is said to have consisted of more than 3,000 villages excluding those near Rewāri and Hissār which, though occasionally occupied by him, were never held for any length of time. A complete list of his successors will be found in Table No. LIV in Vol. III-B.

Rao Naro, 1504.

The second chief of Bīkaner was Naro or Naruji, a son of Bīka; he was born in 1469, succeeded in 1504, and died childless in the same year after ruling for about four months. He was followed by his brother Lūnkaran, who was born in 1470. His first expedition was against the *bhūmiās*, whom his father had deprived of their estates and who were now giving trouble. Dadrewa (in the Rājgarh *tahsīl*) was the rallying point of the disaffected and was captured only after a siege of seven months. Next, taking advantage of a feud among the Kaimkhānis who possessed Fatehpur (now in the Sīkar estate in Jaipur), he interposed and received 120 villages, and later on he attacked the Chāyal Rājputs on the Sirsa and Hissār borders and annexed much of their territory. He is mentioned as marrying a daughter of Rānā Rai Mal of Mewār in 1514, and the only other event of importance was a war with Jaisalmer. The Rāwal of that State (Devī Dās) was taken prisoner and escorted to his capital which was plundered, but he was released two months later, and peace was made between the parties. Devī Dās, however, determined to have his revenge; forming an alliance with some Nawāb of Sind, he attacked Lūnkaran near Dosni in 1526 and, in the fight that ensued, the latter, being shamefully deserted by most of his followers, was killed. On the news reaching Bīkaner, three Rānīs became *satī*. Of Lūnkaran's nine sons, Jet Singh succeeded to the *gaddi*, while Ratan Singh established himself at Mahājan, and his descendant is the premier noble of the State at the present day.

Rao Lūnkaran, 1504-26.

Rao Jet Singh, 1526-41.

Rao Jet Singh was born in 1489 and succeeded in 1526; his first act was to expel Thākur Udai Karan Bīdāwat as a punishment for his treachery in having deserted his father in the battle above mentioned, and he next chastised the Johiyas because most of them had refused to join in the expedition against Jaisalmer. Later on, his troops took Bhatner from the Chāyal Rājputs, and this exploit brought him into collision with the Mughals. A Jain priest of Bhatner, offended with the Bīkaner party, repaired to Delhi where he told Kāmrān, son of the emperor Bābar, of the existence of this fine fort on the border of the desert. Kāmrān came down with a large army, took the place in 1538, and marched on Bīkaner itself, but Jet Singh attacked him by night, and the Musalmāns fled panic-stricken. Three years later, Māldeo, chief of Jodhpur and "the most powerful prince in Hindustān," invaded Bīkaner, slew Jet Singh, captured the fort at the capital, and possessed himself of about half the territory. Jet Singh's family escaped to Sirsa, but "seven of the women ascended the funeral pile of their lord."

Rao Kalyān Singh, 1541-71.

The next Rao of Bīkaner was Kalyān Singh, the eldest son of Jet Singh, who had already represented his house in the army of the great Rānā Sanga of Mewār and had taken part in the bloody battle of* Khānua (in Bharatpur) in March 1527, when Bābar overthrew the Rājput host. He succeeded to the *gaddi* in 1541, but his capital and about half of his lands remained in the possession of Māldeo of

* See Vol-II-A. of this series, page 18.

Jodhpur for nearly three years, and during this period he made Sirsa his headquarters. His brother, Bhīm Rāj, at once proceeded to Delhi where he was well received and became intimate with Sher Shāh, and in 1544 Kalyān Singh himself joined the imperial army, marched with it to Ajmer, and witnessed the discomfiture of his kinsman, Māldeo, in the battle fought near that city. This is the first mention of friendly intercourse between the Bīkaner State and the Muhammadan emperors. From Ajmer Kalyān Singh journeyed to his capital, which had just been vacated by the Jodhpur troops, and shortly afterwards his brother Thākur Singh captured the fort of Bhatner from the Chāyals (who seem to have taken it from the garrison left there by Kāmrān in 1538) and reduced all the surrounding *parganas*, such as Sirsa, Fatehābād, Siwāni, etc. Twenty years later, some imperial treasure was plundered by dacoits near Bhatner, and the *Sūbahdār* of Hissār, by Akbar's orders, invested the place and, after a lengthy siege, took it. Thākur Singh and many of his followers being killed in the final desperate sally. Bāgh Singh, son of Thākur Singh, hastened to Delhi where, by his extraordinary strength and prowess—he is said to have killed a lion without weapons of any kind—he attracted the emperor's notice and received back the fort.

Kalyān Singh seems to have recognised the advantage of being on good terms with the great Mughal, for we read in the *Tabakāt-i-Akbarī* that he and his son Rai Singh waited on Akbar at Nāgaur (in Jodhpur) in 1570 and presented tribute, and, "the loyalty and sincerity of both father and son being manifest, the emperor married Kalyān Singh's daughter." Thence Akbar proceeded to Ajodhyā (in the United Provinces) where the Rao, "who was so fat that he could not ride on horseback, received permission to return to Bīkaner, but his son was ordered to remain in attendance on His Majesty, in which he received high promotion, as will be related in the proper place." Kalyān Singh died a year later (1571), and six Rānīs and ten concubines perished on his pyre; he had ten sons, the eldest of whom, Rai Singh, succeeded him.

Rao, afterwards Rājā, Rai Singh, 1571-1611.

Rai Singh was born in 1541, and became the sixth chief of Bīkaner thirty years later; he was one of Akbar's most distinguished generals, seeing service in various parts of India, such as Jodhpur, the country around Attock, Gujarāt, Sirohi, Bengal, the Deccan, Sind, Udaipur, and the Punjab. In 1572 he was told off "to keep the road to Gujarāt open and prevent any annoyance from Rānā Kika" (Pratāp Singh I of Udaipur), and, about the same time, "Akbar assuming a superiority to which he was not entitled, presented him with the formal grant of Jodhpur itself, but he did not, however, obtain possession." In the following year, when Ibrāhīm Husain Mirza, after his defeat at Sarnāl, besieged Nāgaur—then held by Khān-i-Kalān—he hurried to the relief of the latter, and not only forced the Mirza to raise the siege but pursued and defeated him. He was next sent to Attock, where Kunwar Mān Singh (of the Amber or Jaipur family) was governor, and the imperial troops were so roughly handled by the Pathāns that the emperor himself had to

come to their assistance. After a brief holiday in his own country, Rai Singh returned to Delhi and was given a high command in the great expedition against Ahmadābād in Gujarāt. Accounts differ as to what occurred there; Tod writes that Rai Singh distinguished himself in the assault of the city by "slaying in single combat the Governor, Mirza Muhammad Husain," while Dow says that the Mirza was wounded, taken prisoner, and made over to the Bikaner chief who, "to revenge some former quarrel, basely embrued his hands in the blood of Husain who had been left in his possession." The account in the *Tabakāt-i-Akbarī* is not dissimilar from that of Dow, but it is explained that, just after the Mirza had been given into the custody of Rai Singh, "another large division of the enemy made its appearance" and "the Rājputs threw him off his elephant and despatched him with a spear." The local version merely tells us that the Bīkaner losses in this expedition were heavy, thirty-three Thākurs and officials having fallen, that Rai Singh's brother, Rām Singh, distinguished himself and received a *mansab*, and that the Rao himself was made a Rājā and obtained a grant of fifty-two *parganas* worth more than ten lakhs of rupees a year.

Rai Singh was next ordered to punish Chandra Sen, son of Māldeo of Jodhpur, but, as he failed to take his stronghold, Siwāna, he was called to court in 1576, and the command was given to Shāhbāz Khān. Before the end of that year, Rai Singh was sent against Rao Sūrthān of Sirohi who had assumed a hostile attitude; having besieged and captured his capital, he "marched to Abugarh which Sūrthān surrendered. A garrison was left there, and the Rao was taken to court. The above is the Muhammadan account; the local chronicles tell us that Rai Singh marched to Mount Abu and attacked Sūrthān in his fort of Achalgarh; the latter, making an imprudent sally, was taken prisoner by the Thākurs of Mahājan and Dronpur and carried off to Bikaner, where he was confined in a palace called the Naughara.

The city of Jodhpur is said to have been taken from Chandra Sen by Rai Singh's distinguished brother, Rām Singh, in 1578 and to have been for four years the residence of Rai Singh, who then persuaded the emperor to re-establish Udai Singh, the lawful ruler, in his rights and create him a Rājā. Rai Singh is mentioned as one of those who were sent in or about 1582 to effect the conquest of Kābul, and two years later he served in Bengal, while in 1586 his daughter was married* to prince Salīm (afterwards the emperor Jahāngīr), their son Parwez being one of those who unsuccessfully strove for the empire with Shāh Jahān. About this time, he and Ismāil Kulī Khān, successfully led an expedition against the Baluchis, and returned bringing with them the chief men and leaders of the tribe; he was next employed for several years in the Deccan where he was *Sūbahdār* of Burhānpur and, while there, he planned and caused his minister, Karm Chand Bachāwat, to begin the present fine fort of

*"The Rājā sent fine presents with his daughter and felt highly honoured by the alliance." [*Tabakāt-i-Akbarī*].

Bikaner; the foundations were dug in 1588 and the work was finished by 1593, the year after he returned from the Deccan. After serving in Sind with Khān Khānān (Mirza Abdur Rahīm) and in the Deccan with prince Dāniyāl, he was made governor of Surat about 1596.

At the death of Akbar (1605), Rai Singh was a *mansabdār* of 4,000, but Jahāngīr made him one of 5,000 and, when he set out for the Punjab to pursue Khusrū," put him in charge of the travelling harem." The Rājā, however, left without orders and proceeded to his capital, but, on the emperor's return from Kābul in 1506, he "presented himself at court with a *fautah* round his neck, to show his willingness to suffer punishment for his crimes, and was again pardoned." Subsequently he appears to have been reappointed to the *Sūbah* of Burhānpur, and he died at that place in 1611, three Rānīs and three concubines being burnt with him.

Rājā Dalpat Singh, 1611-13.

The next chief of Bīkaner was Dalpat Singh, the eldest son of Rai Singh, born in 1564; in Akbar's reign he held a *mansab* of 500, and is said to have "served in the Sind war *(1592), but was looked upon as a coward." On his father's death (1611), he went to Delhi where he remained in attendance on Jahāngīr for about a year, and then returned to his capital, apparently without leave, for he was summoned back and, as he did not obey, incurred the imperial displeasure. In his own State he made many enemies, including his brother Sūr Singh whom he deprived of all his lands and villages except Phalodi. Sūr Singh therefore went to Delhi, where the emperor made him a grant of Bīkaner and sent an army of 50,000 men under Nawāb Zābita Khān to put him in possession; but Dalpat Singh defeated the force at Chhāpar, and the Nawāb though largely reinforced, dared not face the Rājā again, so great was his prowess. Shortly afterwards, Dalpat Singh was treacherously seized by the Thākur of Churu and conveyed to Hissār, whence he was removed to Ajmer and imprisoned. He had been there for four months, guarded by one hundred men, when Thākur Hāthi Singh of the Champāwat sept of the Rāthors of Mārwār happened to halt at Ajmer, and was persuaded to attempt his rescue; the Thākur's party of four hundred men, half of whom were mounted, attacked and killed the guard over Dalpat Singh and released him, but they were soon surrounded by the *Sūbahdār* of Ajmer with 4,000 men and cut† to pieces. Eight days later, the news reached Bhatner where, as the safest place in his territory, the Rājā had sent six of his wives, and all these ladies became *satī* with the turban of their lord and master, a monument with their hands carved on it bearing witness to the fact.

The above account is taken from the local chronicles, but the Musalmān version is rather different and makes no mention of the large army sent to put Sūr Singh in possession. We are told that

* *Ain-i-Akbarī.*

† In memory of Hāthi Singh's devotion, the Champāwats have the privilege of riding to the Hāthi Pol gate of the Bikaner fort, while others have to dismount at a distance.

Dalpat Singh was acknowledged by Jahāngīr as chief of Bīkaner "and got the title of Rai, although his younger brother (by another mother), Sūr Singh, claimed the right of succession, which Rai Singh had promised him from affection to his mother. Sūr Singh, however, disgusted the emperor by the bold way in which he preferred his claim. Dalpat Singh was then ordered to join Mirza Rustam, the governor of Sind, and in 1613 it was reported to Jahāngīr that Sūr Singh had attacked and defeated his brother, who in consequence had created disturbances in Hissār. Hāshim, the *Faujdār* of that *sarkār*, caught him (Dalpat Singh) and sent him fettered to court, where he was executed as a warning to others."

Rājā Sūr Singh, 1613–31.

Sūr Singh, who was born in 1594, succeeded his brother in 1613 and, as usual, went to Delhi to do homage; he is said to have retained the imperial favour during the whole of Jahāngīr's reign, but does not seem to have held so much territory as his father, for the State comprised only thirteen *parganas*, including, however, Nāgaur and Phalodi (now part of Jodhpur) and most of Sirsa and Hānsi. He carried out the dying wishes of Rai Singh by inducing the Bachāwats, the family of the late minister Karm Chand, to return to Bīkaner and by then killing them all. He himself died while on service in the Deccan in 1631, and his *satīs* numbered but four, namely two Rānīs, one concubine and a slave girl.

A circumstance occurred in Rājā Sūr Singh's time which to the present day affects the marriage relations of Bīkaner. A niece of his had been married to Rāwal Bhīm of Jaisalmer and, shortly after the death of the latter, she sent him an urgent message begging him to come with troops at once in order to save the life of her son, whom the Bhātis wished to kill. Before Sūr Singh could reach Jaisalmer, news of the murder of his grand-nephew arrived, and he then swore that no Bīkaner chief's daughter should ever again go to Jaisalmer—an oath which has been held binding by his successors and still has force.

Rājā Karan Singh, 1631–69.

Sūr Singh was succeeded in 1631 by his eldest son Karan Singh who, according to Tod, had held a *mansab* of 2,000 and the government of Daulatābād in his father's lifetime; he proceeded as usual to Delhi, but does not seem to have prospered much there as the district of Nāgaur was, a few years later, taken from him and conferred on Amar Singh, an uncle of the chief of Jodhpur. In 1644 he was sent to the Deccan to repress a petty rebel whose town, Jaori, was granted to him, and he returned to Bīkaner three years later in time to subdue his vassal the Rao of Pūgal who was giving trouble. In the struggle between the sons of Shāh Jahān for the imperial throne, Karan Singh threw in his lot with the fortunate Aurangzeb, and two of his four gallant sons (Kesri Singh and Padam Singh) were present in the principal battles, and it is said that in more than one they led the van. In the last fight with Dārā (at Sāmogarh in the Agra District) they particularly distinguished themselves, "in appreciation of which the emperor with his own handkerchief

brushed off the dust from their persons as they stood before him hot from the battle."

An incident occurred in Rājā Karan Singh's time which is well-known throughout Rājputāna. The Rājput chiefs had joined the imperial army ostensibly for a campaign beyond the Indus, but, by the time they had reached Attock, Karan Singh discovered, with the assistance of a friendly Saiyid in his service, that the emperor intended to convert all the Hindus by force after they had crossed the river. They therefore took counsel regarding the course to be pursued, and it was agreed to act in such a way that the Musalmāns would insist on their right of precedence as regards the passage of the river, which the Hindus would thus be enabled to place between themselves and their enemies. Accordingly, the Rājās sent their *harkāras* (messengers) to take possession of the boats and, as had been foreseen, the Musalmāns resented this movement, as an impertinence, drove away the *harkāras*, and declared that they would use the boats first. Just as the latter, containing the Muhammadan portion of the army, had crossed the river, news arrived of the death of the mother of the chief of Amber (Jaipur), and on this pretext all the Rājās delayed their crossing for twelve days, during which the next step to be taken was anxiously discussed. It was evident to them that, were they to leave the means of instantly recrossing the river in the hands of the emperor, they would, if they turned their faces homewards, be immediately attacked in their rear by the superior Musalmān force and, at the best, could not escape without severe loss. At length, they came in a body to Karan Singh and pointed out that, since his territories were the least susceptible of invasion, he could, with comparatively little danger to himself, save their religion and bear the brunt of the imperial displeasure by beginning the destruction of the boats. Karan Singh assented on condition that they would all for one day greet him thus:—*Jai Jangal dhar* * *Bādshāh*, meaning "Victory to the king of the desert." To this the Rājput chiefs agreed, and the Bīkaneris then set to work to destroy the boats in the presence of the *ahadī* or imperial messenger; the guilt of leading the league being thus laid upon the shoulders of Karan Singh, the other Rājās and their followers joined in, all the boats were soon useless, and the Rājputs set off securely on their way home.

Aurangzeb returned to Delhi naturally very angry with the Bikaner chief, whom he summoned to his presence; the call was obeyed, but the Rājā's two most distinguished sons, Kesri Singh and Padam Singh, were sent on ahead. The emperor had resolved to have Karan Singh murdered in *darbār*; the plot had matured and the assassins were present, but all was frustrated by the formidable

* This has since been the motto of the Bikaner house, and when the present Mahārājā arrived at Calcutta with his Imperial Service regiment *enroute* to China, the Mārwāris made Howrah station ring with reiterated acclamation of *Jai! Jai! Jangal dhar Bādshāh!*

appearance of the famous brothers as they sat beside their father. A sign was made to the assassins not to act, and they were only too glad to obey it; and, as the Bīkaner party were leaving, Aurangzeb praised the chief's gallant sons, specially alluding to the conduct of Kesri Singh in the last great battle with Dārā. Shortly afterwards, Karan Singh was sent to Aurangābād in the Deccan, where he founded three villages, namely Karanpura, Kesri Singhpura and Padampura, which were held by the Bīkaner Darbār till 1904, when they, together with a fourth village named Kokanwāri, were transferred to the British Government in exchange for two villages in the Hissār District and a cash payment of Rs. 25,000. He died in the Deccan in 1669, eight Rānīs and eleven concubines becoming *satī* after his death, and he was succeeded by his eldest son, Anūp Singh.

Rājā, afterwards Mahārājā, Anūp Singh, 1669-98.

The succession was not at first recognised by the emperor who appears to have granted the territory to Banmāli Dās, an illegitimate son of the late Rājā, as a reward for having become a Muhammadan, though it is doubtful if he ever obtained possession. On Anūp Singh proceeding to Delhi, the State was conferred on him, and he was made a *mansabdār* of 3,000; he was at once sent to the Deccan where he had to contend with the chief of Rājgarh, and he subsequently took a prominent part in the capture of Golconda (1687). For these and other services, he was made a Mahārājā—a title since held by his successors. After a short time spent at home, he was deputed to Adoni in the Bellary District of the Madras Presidency, and he died there in 1698, two Rānīs, ten concubines, four slave girls and three female attendants being burnt with him. The only other events of this time deserving of mention were (i) the rebellion of two of the Bhāti Thākurs who held out in the fort of Churaia (about ninety miles north of Bīkaner city), where they were joined by the Johiyas, but the rising was put down by an energetic official of the Mahājan caste, called Mukand Rai, and the fort was dismantled and replaced in 1678 by a larger one (Anūpgarh); (ii) the temporary loss of the Sirsa *pargana*, which was taken by the Johiyas, and of Bhatner; and (iii) the appearance of Banmāli Dās who, having persuaded the authorities at Delhi to grant him half of the Bīkaner territory, came to take possession, but his career was cut short by a cup of poison, given him by a slave girl whom he had married in the belief that she was a Thākur's daughter!

Mahārājā Sarūp Singh, 1698-1700.

Anūp Singh was succeeded in 1698 by his eldest son Sarūp Singh, then but nine years of age; he was with his father at Adoni when he died, and he never left the place as he fell a victim to small-pox two years later. The period is noticeable only for the *zanāna* intrigues at the capital which culminated in the treacherous murder of one of the leading Thākurs by a eunuch.

Mahārājā Sūjān Singh, 1700-35.

The next chief of Bīkaner was Sūjān Singh, a brother of Sarūp Singh, and he succeeded in 1700 at the early age of ten. On Aurangzeb's death (1707), he was deputed to the Deccan and served there till 1719; during his absence, Mahārājā Ajīt Singh of Jodhpur

occupied Bīkaner city, but eventually withdrew as his troops "suffered much from the heat and want of water." Sūjān Singh, on his return from the Deccan, was summoned to Delhi, where Muhammad Shāh had just taken his seat on the throne, but did not think it necessary to obey, though, in order not to break altogether with the emperor, he sent a contigent to serve him. He next proceeded to Dūngarpur, where he was married, and on his way back spent a month at Udaipur as the guest of the Rānā, while in 1730 he subdued the rebellious Bhattis and Johiyas, and recovered from the former the fort of Bhatner. Three years later, a Jodhpur army, commanded by Bakht Singh, brother of Mahārājā Abhai Singh, again invaded Bīkaner, but was defeated by Zorāwar Singh, Sūjān Singh's eldest son, near the capital and forced to retire, and an attempt made in or about 1734 by Bakht Singh to seize the fort was equally unsuccessful. Sūjān Singh died in 1735 at Rai Singhpura, where he had gone to settle a quarrel between the Thākurs of Bhādra and Bhūkarka; five concubines committed *satī* there, and two days afterwards, when the news reached the capital, four Rānīs were burnt with his *pagrī*.

Mahārājā Zorāwar Singh, 1735-45.

Sūjān Singh was succeeded by his eldest son, Zorāwar Singh, who was born in 1712 and ruled for ten years. During this period there was constant fighting between Bīkaner and Jodhpur, and some of the Thākurs of the former State, such as Bhādra, Churu and Mahājan, went into open rebellion and gave much trouble. The first invasion of Bīkaner by Jodhpur in 1739 came to nothing, but the second was more successful as the capital was taken and plundered, and the fort was invested for three months and five days, when Abhai Singh raised the siege and hurried of to look after his own territory which, at the urgent request of Zorāwar Singh, was being invaded by the Jaipur chief (the great Sawai Jai Singh). It was with the help of troops supplied by the latter that the disaffected nobles above mentioned were reduced. Another important event was the capture of Bhatner, a fort which seems to have changed hands very frequently; at this time it was held by the Johiyas from whom Bhīm Singh, Thākur of Mahājan, obtained permission to take it. This task he successfully performed and found four lakhs of rupees and many gold *mohurs* there, but, as he evidently wished to appropriate both the place and the treasure, the Darbār sent a force under Hasan Khān Bhatti against him, and he was driven out. Zorāwar Singh's last exploit was against Hissār which he took, and, a few days later in (1745), he died at Anūppura (in the Bhādra *tahsīl*), not without suspicion of poison; no less than twenty-two women are said to have become *satī* on this occasion, including two Rānīs and, strange to say, a Brāhman employed in the kitchen.

Mahārājā Gāj Singh, 1745-88.

Zorāwar Singh had died childless, and the claimants to the *gaddi* were his cousins, Gaj Singh and Amar Singh, both sons of Anand Singh; eventually Gaj Singh, who was the elder of the two brothers—having been born in 1723—was selected as ruler of Bīkaner and succeeded in 1745, while the disappointed Amar Singh repaired to Jodhpur where he found other Bīkaner malcontents. Some two years later,

the territory was again invaded by a large army from Jodhpur which, after doing some mischief on its march, encamped in the neighbourhood of the capital. The Bīkaner troops had been for some time kept ready for action, but no decisive battle was fought, although for months the two forces faced each other. At length, Jodhpur proposed a division of the territory as the only means of terminating the struggle, to which Gaj Singh replied that he would not give up a needle's length and suggested that "tomorrow, swords in hand, we further discuss the question of peace;" in the engagement that ensued the invaders were routed and had to burn their tents and retire to their own country.

In the following year (1748), Gaj Singh attacked the Bhātis of Bīkampur in the south-west, slew the Thākur, and took the place, but it was soon recovered by the Rāwal of Jaisalmer and now belongs to that State; while, in 1751, he is said to have assisted Bakht Singh in expelling his nephew Rām Singh and seizing the Jodhpur *gaddi*. A year later, he visited Jaisalmer to marry the daughter of Rāwal Akhai Singh, and, about this time, a copper mine was discovered near Bīdāsar in the Sūjāngarh *tahsīl* in the south. In the same year (1752), the *pargana* of Hissār, being found uncontrollable from Delhi, was assigned by Muhammad Shāh to Gaj Singh who further received a *mansab* of 7,000, a magnificent *khilat*, and the title of *Srī Rāj Rājeshwar Mahārāj Dhirāj Mahārājā Saromān*, while in 1753 he was granted the privilege of coining money.

In the contests for the Jodhpur *gaddi* between Rām Singh and Bijai Singh, the Bīkaner chief favoured the cause of the latter who was the son of his old friend Bakht Singh, and he took part in the desperate battle fought near Merta in which Rām Singh, with the assistance of a Marāthā army under Jai Appa Sindhia, was victorious. The year 1755-56 is mentioned as one of great famine, and arrangements were made for the daily distribution of food, while many people found employment in building the city wall at the capital. Four or five years later, the Bhattis and Johiyas were troublesome in the north and had to be subdued, and Dāud Khān, an Afghān chieftain from Shikārpur, seized Anūpgarh which, however, was soon recovered by Bīkaner troops. The only other events of importance were a successful expedition against Sirsa and Fatehābād in 1768, a visit to the famous shrine of Nāthdwāra in Mewār, and the rebellion of the heir apparent in 1775. Mahārājā Gaj Singh died in 1788, and no *satī* occurred on this occasion.

Mahārājā Rāj Singh, 1788.

The next two chiefs occupied the *gaddi* for a few days only. The first was Rāj Singh, the eldest surviving son of Gaj Singh, who was born in 1744; he was very ill when his father died, and he ruled for but ten days. Tod says that he enjoyed the dignity only thirteen days, being removed by a dose of poison administered by his step-mother (the mother of his younger brother Sūrat Singh); it is remarkable that a man, Sangrām Singh Mandlāwat, was burnt with his corpse.

Mahārājā Pratāp Singh, 1788.

Rāj Singh left a son, Pratāp Singh, who was then about six (or, as others say, eleven) years of age; he survived his father but a short

time, and there is little doubt that he was murdered by his uncle Sūrat Singh. According to Tod, the boy was an infant and about a year later "was found strangled, it is said by Sūrat Singh's own hands, he having in vain endeavoured to obtain the offices of the Mahājan chieftain as the executioner of his sovereign."

Sūrat Singh, who was born in 1765, thus succeeded as Mahārājā of Bīkaner in 1788 and, three years later, a reconciliation with Jodhpur was effected. In 1799 he founded Sūratgarh, and about the same time marched with 2,000 men against the Bhattis of Bhatner, but, being pressed by Zābita Khān with 7,000 men, had to fall back. Supplies and reinforcements having been obtained, he returned to the attack and defeated the Bhattis near Dābli in the north-east, where he built a fort called Fatehgarh; the place fell into the hands of the adventurer George Thomas but was soon recovered by the Darbār. In 1801, at the instance of one Khudā Baksh Dāudputra, who had just been deprived of his estate (Mojgarh) by his chief, Bahāwal Khān, a large army was sent to seize the chain of forts in the desert on the Multān-Delhi route; several of them, such as Walar or Balar (renamed Siogarh), Phulro, Mīrgarh and Mārod, were captured, and the troops then marched upon Bahāwalpur itself, but by this time Khudā Baksh had become reconciled with his chief, who persuaded him to sever his connection with the "land-seizing Rāthors," so the Bīkaner force was dismissed with two lakhs of rupees. Mahārājā Sūrat Singh, 1788-1828.

Some four years later, one Amar Chand (who was afterwards minister) was sent against the fort of Bhatner which, after a siege of five months (during which the garrison was reduced to eating crows), was surrendered to him by Zābita Khān, a Bhatti chief; and, because this event occurred on a Tuesday, a day sacred to the monkey-god, the place was renamed Hanumāngarh. In 1807, Sūrat Singh allied himself with the chief of Jaipur and the great freebooter Amīr Khān and marched on Jodhpur to support the pretender Dhonkal against Mahārājā Mān Singh; the city was taken and plundered, but the fort held out and, after a siege of five months, when Amīr Khān changed sides, the insurgents were themselves forced to retire with considerable loss and ignominy. In the following year, Mān Singh invaded Bīkaner and invested the capital, but he withdrew his troops on Sūrat Singh giving up Phalodi and its villages and paying an indemnity of two or, as some say, three lakhs. It was while the Jodhpur army was in a half-hearted manner besieging the fort that Mr. Elphinstone passed through Bīkaner on his way to Kābul; the Mahārājā treated him with great respect and applied for the protection of the British Government, but this request could not be granted as it was opposed to the policy then prevailing.

Between 1809 and 1813, Sūrat Singh, whose extortions knew no bounds and whose cruelty kept pace with his avarice and his fears, plundered, fined and murdered his Thākurs, with the result that in 1815 there was a more or less general rebellion. Some of the ousted nobles recovered their estates, ravaged the country and defied the Darbār; Amīr Khān and the Pindāris appeared on the scene in 1816,

and the insurrection had become so serious that the Mahārājā again asked for British aid. A treaty was concluded on the 9th March 1818 by which Sūrat Singh and his successors were bound to subordinate co-operation, and the British Government agreed to protect his territories and, on his application, reduce his rebellious subjects to obedience; no tribute was exacted as the State had paid none to the Marāthās. Shortly afterwards, British troops of the three arms under the command of Brigadier Arnold entered Bīkaner and took altogether twelve forts, making them over to the Darbār; very little opposition was offered, but some difficulty was experienced from the scarcity of water, and it was soon found necessary to send back the cavalry. The Bhādra fort was one of those handed over to the Darbār, but the *tahsīl* of the same name was retained by the British for four years till the expenses of the force (Rs. 75,525) had been paid.

Treaty with the British Government, 1818.

In 1820, the Mahārājā's eldest and second sons were married to daughters of the Mahārānā of Udaipur, and one of these ladies, named Dīp Kunwar, (the wife of Motī Singh who died in 1825), is noticeable as the last distinguished *satī* in Bīkaner; a fair is held in her honour at Devī Kūnd (five miles east of the capital) annually in August or September. In 1822 the Bīkaner State laid claim to the villages of the Tibi *sub-tahsīl* which it said formed part of Bhatner but which the British Government had bestowed on old soldiers, and it also claimed forty villages adjoining Bhādra; but the decisions of Mr. Trevelyan, who was deputed in 1828 to make enquiries, were in both cases unfavourable to the Darbār. The Tibi *sub-tahsīl* was, however, granted to Mahārājā Sardār Singh in 1861 as a reward for his services during the Mutiny. Sūrat Singh died in 1828 and was succeeded by his eldest son Ratan Singh.

Mahārājā Ratan Singh, 1828-51.

In the following year the new chief, in violation of his treaty engagements, invaded Jaisalmer to revenge some injuries committed by subjects of the latter. Jaisalmer had prepared an army to repel the attack, and both parties had applied to neighbouring States for assistance when the British Government interfered, and, through the arbitration of the Mahārānā of Udaipur, the dispute was settled. In 1830 Ratan Singh found some of his nobles troublesome and applied for British aid to reduce them, but this could not be granted. Colonel Powlett in his *Gazetteer of the Bīkaner State* (1874) mentions an incident which having regard to the treaty of 1818, seems at the present day rather curious, namely the grant in 1831 by the titular king of Delhi, Akbar II, to Ratan Singh of the title of *Narendra Sawai* or, according to the *Administration Report of the State* (1893-94), of *Narendra Saromān*. During the next four or five years, dacoity was so rife on the border to the south and south-east that it was decided to raise a special force to suppress it; this force was called the Shekhāwati Brigade (one troop consisting solely of Bīdāwats, *i.e.* of descendants of Bīda, the brother of Bīka), and for seven years the Bīkaner State contributed Rs. 22,000 annually towards its cost. The nobles continued their plundering for a time, but the brigade, under the vigorous leadership of Major Forster, soon brought them to order, while its

presence in the vicinity greatly increased the controlling power of the Mahārājā and enabled him to levy for the first time a cash payment from his Thākurs in lieu of the service required by his father. In 1839 the heir apparent (Sardār Singh), was married to the sister of the Mahārānā of Udaipur; in 1840 the latter married a daughter of the Bīkaner chief; in 1842 Ratan Singh supplied two hundred camels for the Kābul expedition; in 1844 he agreed to a reduced scale of duties on goods in transit through his country, *viz*. a rate of eight annas instead of as many rupees per camel load, etc., and he assisted Government in both the Sikh campaigns, receiving on the first occasion two fully equipped guns in recognition of the services of his contingent. The Mahārājā died in 1851 after ruling for twenty-three years, of which only two (1836 and 1837) were those of plentiousness, while in two others (1834 and 1849) actual famine occurred; nevertheless, the people were generally contented, and all the Thākurs were submissive save those of Sīdmukh and Rājpura.

Mahārājā Sardār Singh, 1851-72.

The next chief was Sardār Singh, son of Ratan Singh, who was born in 1819; he found his State encumbered with a debt of about 8½ lakhs, caused partly by the necessity of having to keep up a large army in order to check and subdue the turbulent nobles and protect the Bahāwalpur, Jaisalmer, Jodhpur and Shekhāwati frontiers from robbers and dacoits, and partly by adverse seasons. He ruled for twenty-one years, and during this period there were no less than eighteen changes in the ministry, man after man being dismissed because of his inability to comply with the pecuniary demands made by the Mahārājā. From 1856 to 1863, and again for a short time in 1865, the administration was carried on with ability and integrity by Rām Lāl Dwārkāni, but his enemies prevailed against him and he was removed. His successors held office for a few days or, in some cases, a few months each, and most of them proceeded to fill their pockets as fast as they could; affairs fell into the utmost confusion, a large amount of debt was incurred, and the exactions of the chief in his anxiety to increase the revenue gave rise to much discontent. Sardār Singh, however, rendered good services during the Mutiny by sheltering Europeans and co-operating against the rebels of Hānsi and Hissār, and, as a reward, received in 1861 a grant of the Tibi tract, consisting of forty-one villages of the Sirsa District, while the privilege of adoption was guaranteed to him and his successors in the following year.

In May 1868 an assistant to the Governor General's Agent was deputed to Sūjāngarh in the south with the object of checking dacoity which was very rife, and he was also entrusted with the political charge of the State. Shortly afterwards, the Thākurs again rose to resist the extortions of the Darbār, their chief grievances being (i) the seizure of some of their villages, (ii) the exactions levied from them under the name of *nazarāna*, and (iii) the collection direct from their villages of certain miscellaneous cesses. An enquiry was held, and in 1870 both parties (the Thākurs of Mahājan excepted) agreed (*a*) that all villages which formed part of estates held under valid grants at the

time of Sardār Singh's succession but which had been subsequently resumed were to be restored, while the Mahārājā was to be at liberty to deal as he liked with his own grants; and (*b*) that the *rekh* or cash payment made by the Thakurs in commutation of service should be fixed at Rs. 200 per horseman annually for a period of ten years, after which the amount was to be reconsidered by a *panchāyat*--this sum of Rs. 200 to include everything except *nazarāna* or fee on succession to an estate.

Other events of this time were the extradition treaty of 1869 (subsequently modified in 1887); the abolition of the privilege of sanctuary for crime in 1870; and the establishment of a Council and regular civil, criminal and revenue courts at the capital in 1871. Mahārājā Sardār Singh died suddenly on the 16th May 1872, leaving no legitimate issue; his widow and the principal persons of the State selected Dūngar Singh as his successor, and the choice was confirmed by Government.

Mahārājā Dūngar Singh, 1872-87.

Dūngar Singh, a descendant of Chhatar Singh, one of Mahārājā Sūrat Singh's brothers, was born in 1854 and took his seat on the *gaddi* on the 21st July 1872. As he was a minor, the State was managed for a few months by a British officer assisted by the Council, but he was invested with full powers on the 22nd January 1873. Maladministration and the discontent of the Thākurs did not, however, cease, and it became necessary to call on the Mahārājā to carry out the reforms promised by his predecessor; this and other warnings had a salutary effect for a time, but affairs gradually relapsed into confusion until (in 1883) an attempt to raise the *rekh* brought matters to a crisis. Most of the nobles rose in open rebellion against their chief and, though a British officer was deputed to enquire into and effect a settlement of their differences, they refused to come to any amicable agreement; indeed, it was not until a small British force from Nasīrābād had marched a considerable distance towards Bīkaner that the majority of them surrendered unconditionally to the Political Agent. The Bīdāwats still held together, but their leaders, the Thākurs of Bīdāsar and Sāndwa, eventually gave in, and their forts were dismantled. A Political Agent * was permanently located at Bīkaner, and the differences between the chief and his nobles were gradually adjusted.

This rising of the Thākurs was the principal event of Dūngar Singh's rule of fifteen years; others deserving of notice were the topographical survey of the State between 1875 and 1880; the agreement of 1879 regarding the local manufacture of salt, etc.; the supply of camels for the Kābul expedition in the same year; the first enumeration of the population in 1881; the summary settlement of the *khālsa* villages; and the establishment of a jail at the capital and of dispensaries, post offices and schools at various places. The Mahārājā died without issue on the 19th August 1887, having, shortly before his death, adopted his younger brother, Ganga Singh.

* For a complete list of Political Agents of Bikaner since 1884 see Table No. LV, in vol. III-B.

The adoption having been confirmed by the British Government, Mahārājā Ganga Singh, who was born on the 3rd October 1880, was formally installed on the *gaddi* on the 31st August 1887, and is the twenty-first and the present chief of Bīkaner. He studied at the Mayo College at Ajmer from 1889 to 1894, and was invested with full powers on the 16th December 1898. During his minority, the State was administered by a Council presided over by the Political Agent, and many events of importance occurred in these eleven years. Among them may be mentioned (i) the construction of the railway from the Jodhpur border to Bīkaner city (1889-91), and the extension to Dalmera, completed by 1898; (ii) the raising of a camel corps for the defence of the Empire (1889-93); (iii) the establishment of a regular Public Works department in 1891; (iv) the famines of 1891-92 and 1896-97; (v) the conversion of the local currency (1893-94); (vi) the introduction of the land revenue settlement (1894-95); (vii) the discovery of a coal mine at Palāna in 1896; (viii) the construction of the Ghaggar canals (1896-97); and (ix) a sound administration of the finances, resulting in a surplus of more than thirty lakhs of rupees (in cash and Government securities) in the year 1898. Mahārājā Ganga Singh, 1887 to date.

Within a year of the Mahārājā receiving his powers, the State was visited by the direst famine of which there is any record, but the young chief, by taking the most active personal part in the relief operations, made the campaign a complete success and was awarded the *Kaisar-i-Hind* medal of the first class. In June 1900 he was gazetted an honorary Major in the Indian Army, and in August of the same year he proceeded to China in command of his Imperial Service regiment, receiving, on his return, the China medal and the dignity of a K.C.I.E. In 1902 he visited England to attend the coronation of His Majesty King Edward VII, and was honoured with the appointment of A. D. C. to H. R. H. the Prince of Wales, while in 1903-04 his camel corps distinguished itself in Somāliland. Lastly, the Mahārājā was created a K.C.S.I. in June 1904 and a G.C.I.E. in January 1907. These are only some of the notable events of the last eight years; much attention has been paid to the important subject of irrigation and to the Police and Educational departments, while the railway line has been extended to Bhatinda in the north-east, and the mineral resources of the State have not been neglected. As in olden days, some of the Thākurs occasionally give trouble; this occurred in 1904, but the situation was faced with energy and promptitude, and the rising caused no prolonged or serious unrest.

The heir apparent to the *gaddi* is His Highness' only son, Mahārāj Kunwar Sārdūl Singh, who was born on the 7th September 1902. The chiefs of Bīkaner are entitled to a salute of seventeen guns, and their motto, as observed at page 321 *supra*, is *Jai Jangal dhar Bādshāh*. The coat of arms carries three white hawks on the five-coloured (*pānchranga*) flag and the shield is supported by two tigers; the patron goddess of the family is said to have once converted the thorny jungle round the city into a grove of fruit-trees, and the crest is therefore a green tree.

Archæology. There are few places of archæological interest in the State; an account of the forts of Bīkaner and Bhatner (now called Hanumāngarh), and of the temples and cenotaphs at or near the capital will be found in Chapter VI below. About sixteen miles south of Bīkaner city is the village of Deshnok which possesses the temple of Karnījī, the tutelary deity of the ruling family; it is said to have been built in the fifteenth or sixteenth century by Karnījī herself and is held in great reverence, but in other respects is in no way remarkable. In the old histories, Karnījī is described as a Chāran woman who lived from 1387 to 1538 and was gifted with supernatural power; when Bīka entered this territory in 1465, she prophesied that his destiny was higher than his father's and that many servants would touch his feet, and thenceforward she was looked upon as the protectress of the State.

CHAPTER III.

THE PEOPLE.

The census of 1901 was the third of a decennial series which commenced in 1881, and the population at each of these enumerations was :—509,021 in *1881*; 831,955 in *1891*; and 584,627 in *1901*. The earliest figures are not altogether reliable as the census was not synchronous and the staff met with a certain amount of opposition; hence the large increase of 63·4 per cent. during the first of the above decades was ascribed partly to improved methods of enumeration, partly to a series of favourable seasons, and partly to the confidence begotten of the strong administration during the minority, which attracted many outsiders. During the ten years ending 1901 the population decreased by 29·7 per cent. in consequence of the famines of 1891-92, 1896-97 and 1899-1900, which caused more than the usual amount of emigration, and of excessive mortality, chiefly from cholera and malarial fever, in the same years. The decrease was most marked among the Hindus, namely nearly 32 per cent., while the Musalmāns lost 17·4, and the Jains about 11 per cent. Some further details will be found in Tables Nos. LVI and LVII in Vol. III-B. Thus, it will be seen that, while the rural population decreased by more than 34 per cent., the urban population fell by only 1·7 per cent. although the number of towns remained the same; again, of the four districts or *nizāmats* into which the territory is divided, Reni in the east suffered most and Sūratgarh in the north least. Population in 1881, 1891 and 1901.

The number of persons per square mile has varied between 21·8 in *1881*, 35·7 in *1891* and 25·1 in *1901*, the similar figures for Rājputāna as a whole having been 78, 94 and 76 respectively. Bikaner is more sparsely populated than any State in the Province except Jaisalmer, and this is due to the desert nature of the greater part of the country. The villages are few and far between—there is only one to every eleven square miles—and have often to be vacated when the supply of water in the wells gives out. In the districts, the density of population per square mile varies from nearly forty in the south and south-east (Sūjāngarh) to a little more than thirteen in the north (Sūratgarh). Density.

Of the nine places treated as towns in 1901, three had a population of less than 5,000, two between 5,000 and 10,000, three between 10,000 and 20,000, and the capital (including suburbs) contained 53,075 inhabitants. The urban population numbered 117,267, or one-fifth of the total population of the State, residing in 23,190 houses. In this way, a town contained on the average 13,030 inhabitants and 2,577 houses, or five persons per house; if, however, we exclude the city of Bīkaner, the first two figures would fall to 8,024 and 1,447 Towns.

respectively, while the number of persons per house would rise to rather more than $5\frac{1}{2}$.

Villages.

Of the 2,101 villages, 1,908 (or nine-tenths) contained less than 500 inhabitants each, 157 had between 500 and 1,000, 28 between 1,000 and 2,000, and eight between 2,000 and 5,000. The rural population (457,360) occupied 93,301 houses, and these figures give us an average of 222 persons and 44 houses per village, and five persons (3·4 in the Sūratgarh *tahsīl* and 5·7 in the Ratangarh *sub-tahsīl*) per house. The villages are of the usual compact type, namely groups of huts erected in the vicinity of wells.

Migration.

Of the total population enumerated in 1901, nearly 94 per cent. were born in the State and another 3·24 per cent. in some other part of Rājputāna (chiefly Jaipur and Jodhpur); the rest came mostly from the Hissār and Gurgaon Districts of the Punjab or from Bahāwalpur and Patiāla. While Bīkaner received from other States of Rājputāna 18,983 persons, she gave them in return only 9,848, so that her net gain was 9,135 persons of whom nearly fifty-four per cent. were females. The movement was greatest with Jaipur, from which State there was a gain of 7,695 persons (4,222 females), and next with Jodhpur—a gain of 2,670 including 1,509 females; the largest losses were to Alwar (300) and Bharatpur (181). In transactions with other parts of India, Bīkaner, however, lost heavily, the number of emigrants exceeding that of immigrants by at * least 133,250; the principal gainers were the Punjab (106,370), Bengal (12,159), the United Provinces (9,710), Bombay (2,551), the Central Provinces (1,236), and Central India (1,078). This excess of emigration over immigration is not difficult to explain. In the first place there is, practically speaking, but one harvest—the *kharīf*—and, as soon as it is gathered in September or October, the majority of the agriculturists prefer a journey to Sind or the Punjab (where they cannot only earn a living but probably save a little money) rather than an idle and unprofitable time at their own homes. In the second place the number of emigrants at the time of the last census (February 1901) was unusually large in consequence of the recent dire famine; and in the third place it must be remembered that Bīkaner is the birthplace (and still the real home) of many enterprising bankers and traders who have business connections all over India and regularly tour in the cold months.

Vital statistics.

The registration of births and deaths was started at the capital in 1886, but the returns were so obviously inaccurate—*e. g.* only 22 births and 908 deaths in 1890, or rates of 0·7 and 27 per mille respectively—that a new system was introduced in 1891. In the year just mentioned, 1,023 births and 1,372 deaths were registered within the city walls, or rates of twenty and twenty-seven per mille respectively, while in 1900, when there was a great deal of sickness, the death-rate was as high as seventy per mille. During the last

* More than 100,000 persons, enumerated outside the Province, gave their birthplace as Rājputāna without mentioning any particular State; some must have been born in Bīkaner.

six years the annual average number of births has been 1,520 and of deaths 1,559, and, taking the population residing within municipal limits at 52,775 (as recorded at the last census), we get an average birth-rate of 28·8 and a death-rate of 29·5 per mille. The statistics are prepared from information given by sweepers, midwives, gate-keepers and the police generally, and those relating to deaths are believed to be fairly reliable.

The system was extended a few years ago to the eight towns in the districts, the population of which was 64,192 in 1901, and returns are available from 1903. The annual average number of births has been 1,144 and of deaths 659, or rates of 17·8 and 10·3 per mille respectively, but these figures have little or no claim to accuracy as the reporting agency is inferior to that at the capital and there is practically no supervision or check. Vital statistics are also recorded within railway limits which contain, however, only 664 inhabitants.

Diseases.

The principal diseases are malarial fevers, most prevalent from the middle of August to the middle of January and largely due to insufficient clothing (especially at night) and extremes of temperature; ulcers and abscesses; scabies and other skin affections caused by want of water for cleansing purposes; pneumonia, rheumatism, and venereal disorders. Guineaworm is also very common. Of epidemics, small pox, for which the most fatal months are February, March and May, appears to have caused considerable mortality in former days, but the virulence of the disease has been much reduced by vaccination. Cholera is comparatively rare, but during recent years there have been outbreaks in 1891-92, 1896-97 and 1899-1900; that of 1892 is said to have claimed some four thousand victims between January and July. Plague has fortunately not visited the State except in the form of thirty-four imported cases, twenty-four of which proved fatal.

Infirmities.

The number of afflicted persons fell from 5,703 in *1891* (namely 378 insane, 5,066 blind and 259 lepers) to 1,457 in *1901* (namely 87 insane, 235 * deaf-mutes, 1,103 blind and 32 lepers), or by more than seventy-four per cent. This decrease was probably due, directly or indirectly, to the recent famine, and to some extent to more accurate enumeration, but the spread of vaccination and the greater readiness of the people to resort to the hospitals and dispensaries may have contributed in bringing about a diminution in the number of the blind.

Sex and age.

The proportion of females to 1,000 males has risen from 734 in *1881* to 890 in *1891* and 908 in *1901*. Of the total population at the last census, more than fifty-two per cent. were males, and the returns show that males exceeded females in every district; in the urban area, however, we find the fair sex predominating everywhere except at Bīkaner city and Sūratgarh. Taking the population by religion, the percentage of females to males at the last enumeration was

* Their number in 1891 was not recorded.

88·3 among Musalmāns, 89·7 among Hindus and nearly 135 among Jains; the last figure is chiefly due to many of the men having gone to other parts of India to visit their shops and out-agencies, leaving their wives and families behind them. An examination of the statistics relating to the various castes and tribes shows that for every 1,000 males the Jain Oswāls and Sarāogīs had respectively 1,360 and 1,354 females, while the Mahesrīs (all Hindus) had 1,269, the Agarwāls (mostly Hindus) 1,113, and the Brāhmans 1,035. The opposite extreme is found in the case of the Hindu Rājputs who had only 726 females to every 1,000 males; the Musalmān Fakirs 780; the Gosains 799; the Rāths (all Muhammadans) 847; the Hindu Jāts 850; the Kaimkhānis 865; and the Bishnois 866.

The record of ages in an Indian census is notoriously untrustworthy as very few people have even an approximate idea of the number of years which they have lived. Taking the Bikaner statistics for what they may be worth, the proportion of females to 1,000 males was:—913 among persons under five; 906 between five and ten; 862 between ten and fifteen; 782 between fifteen and twenty; 896 between twenty and forty; 961 between forty and sixty; and 1,283 beyond the age of sixty. As regards the first of these figures, it may be noted that, among all the three main religions (Hindus, Musalmāns and Jains), boys exceeded girls, but there is no reason to believe that female infanticide, which was once not uncommon among the Rājputs and Jāts, is now practised. The fourth is, as one would expect, the lowest figure, indicating the critical child-bearing period in the life of girls; and in connection with the last it should be remembered that amongst old people of both sexes, but especially in the case of females, exaggeration in the matter of age is very common. The returns also show that the Jains, whether male or female, live longer than Hindus or Musalmāns, and had (in 1901) proportionately more children under five years of age.

Civil condition.

At the last census, more than forty-two per cent. of the people were returned as unmarried, forty-three as married, and nearly fourteen per cent. as widowed. Of the males, about fifty-three per cent., and of the females only thirty-one per cent. were single; there were 1,090 married females to 1,000 married males, and as many as 2,552 widows to 1,000 widowers. The large number of bachelors (fifty-three per cent. of the males as compared with forty-three for the whole of Rājputāna) is noticeable, while the relatively low proportion of spinsters and the high proportion of widows are the results of the custom which enforces the early marriage of girls among many castes and generally discourages the remarriage of widows. The excess of wives over husbands is probably due to several causes, *e. g.* polygamy, the prevalence of *karewa* (or the marriage of a woman with her deceased husband's younger brother) among most of the lower sections of the Hindus, the fact that in adverse seasons men migrate more freely than women, etc. Taking the population by religions, we find that, among the males, 45 per cent. of the Jains, 45½ per cent. of the Musalmāns, and 47 per cent. of the Hindus were married

or widowed, and that, among the females, the similar percentages were Musalmāns 60, Hindus 69, and Jains 70.

Early marriages prevail, but are not nearly so common as in Jodhpur. Thus, of all children under fifteen years of age, only one-twelfth were married or widowed (as compared with one-sixth in Jodhpur), the percentages for the different religions being Musalmāns 6·5, and Jains and Hindus 8·6 each; again, of girls under fifteen, 13·8 per cent. were wives or widows (against 22·6 in Jodhpur), namely 9·7 per cent. of the Musalmāns, 13·4 of the Jains and 14·4 of the Hindus. Polygamy is rare except among the wealthy, and divorce, though allowed by Muhammadan law and among the lower castes of the Hindus, is seldom resorted to; polyandry is unknown.

Language. The language spoken by more than 94½ per cent. of the people is Mārwārī, the most important of the four main groups of Rājasthānī; of its many varieties, those known as Thalī, Bāgrī and Shekhāwatī are most commonly heard. Another 3·3 per cent. were returned as speaking Punjābī—a mixture of western Punjābī and Bāgrī, and sometimes called Jātkī (the Jāt's speech)—and a further one per cent. gave Sindī as their mother-tongue.

Castes and tribes. Of castes and tribes, the Jāts, Brāhmans, Chamārs, Mahājans, Rājputs, Rāths, Kumhārs, Thorīs, Nais and Khātis were most numerous at the last census.

Jāts. The Jāts numbered 133,352 (including 1,184 Sikhs and 151 Musalmāns), thus forming between one-fourth and one-fifth of the entire population; they are found throughout the State, but are numerically strongest in the eastern *tahsīls*. The most important clans of the Hindu section of the tribe are Godāra, Pūniya, Beniwāl, Sohu, Kaswān and Bāgrī, and, as already mentioned, (page 315 *supra*), the headman of the Godāras still has the privilege of placing the *tilak* or mark of inauguration on the forehead of each new chief of Bikaner. Prior to the advent of the Rāthors, the Jāts held the greater part of this territory, but they are now almost all agriculturists and, as such, patient, laborious and skilful, though inferior to the Deswāli and Sikh Jāts of the Punjab; they are described as of strong constitution, civil and good-humoured, but they will neither assist in nor sanction the slaughter of game. By religion they are Vaishnavas, and call in Brāhmans to officiate at their ceremonials, while socially they stand at the head of the widow-marrying castes.

Brāhmans. The Brāhmans numbered 64,107 and are mostly traders and agriculturists, and generally a hard-working class; some perform priestly duties and others hold land revenue-free. Their various septs have never been recorded at any census, but the Pushkarnas and Pāliwāls are said to be most numerous.

Chamārs. The Chamārs or Balais (58,785) formed about one-tenth of the population and included eight Sikhs; they are workers in leather, cultivators and village drudges. The most remarkable fact in connection with them is that, between seventy and eighty

years ago, one of their members founded a religious sect called Alakhgīr which numbers high-caste men among its adherents; this is noticed later on in this chapter under "Religions."

Mahājans. Of the 56,280 Mahājans or Baniās, two-fifths were Jains by religion. The principal divisions found here are Oswāl, Agarwāl, Mahesrī and Sarāogī. They form the bulk of the trading community, many being very wealthy and carrying on an extensive business in the remotest parts of India; some are cultivators and a few are usually in the service of the State.

Rājputs. The Rājputs numbered 54,491 or, eliminating those who returned themselves as Musalmāns (chiefly in the Bīkaner, Lūnkaransar and Rājgarh *tahsīls*), 48,872. They may be divided into three classes, namely (i) the aristocracy of the country, such as the *jāgīrdārs* or *pattādārs*; (ii) those in the service of the above or of the Darbār; and (iii) the tillers of the soil. The last far outnumber the other two put together, and are as a whole both lazy and indifferent. The Census Report of 1901 does not tell us the disposition of the Rājputs by clans, but the Rāthors certainly predominate and the Jādons probably come next. The three great septs of the Rāthor clan in Bīkaner are the Bīkāwat, the Bīdāwat and the Kāndhalot, named after Rao Bīka, the founder of the State, and his brother (Bīda) and his uncle (Kāndhal) respectively; and from these are a number of branches such as Ratan Singhot, Sarangot, Kishan Singhot, Kesho Dāsot, Manohar Dāsot, etc.

Rāths. The Rāths (17,692) are found in no other State in Rājputāna, and are most numerous in the northern *tahsīls* of Bīkaner; they are all Musalmāns but claim descent from Rājputs. In Hissār they are called Pachhādas because they are supposed to have come from the west (*pachhum*), and their facial type suggests a connection with the tribes of the western Punjab. The word *rāth* means cruel or ruthless, and these people were formerly great marauders; at the present time they cultivate little or no land, and their chief occupations are pasturing their own and stealing other peoples' cattle. Some of them possess immense herds and, when grass and water fail, leave their villages without any hesitation and migrate with their animals to the Sind canals or to the Sutlej or sometimes as far as the Cis-Sutlej districts of the Punjab.

Kumhārs. The Kumhārs numbered 15,195 including 989 Musalmāns, thus forming about 2½ per cent. of the population. Though their social standing is low, they are a very useful class, being potters, brick burners and village servants, as well as assisting in the fields.

Thorīs. Of the 14,765 Thorīs enumerated in Rājputāna in 1901, Bīkaner claimed as many as 14,586; they are found in every *tahsīl* or *sub-tahsīl* but are most numerous in the south. Tod calls them "the sons of the devil" and the professional thieves of the desert, "who will bring you either your enemy's head or the turban from it"; they were also proprietors of camels which they let out on hire. They claim Rājput descent, profess Hinduism, drink liquor, and eat all kinds of carcases. Many of them now cultivate land or work

as labourers or grooms, but the tribe still has a bad reputation and is usually classed as criminal.

Nais and Khātis.

The Nais (14,518) were mostly Hindus; they are well known as barbers, match-makers to the lower classes, etc; while the Khātis (14,051) are carpenters.

Religions.

Classifying the population according to religions, we find that in 1901 nearly 84½ per cent. were Hindus, 11·3 per cent. Musalmāns, and four per cent. Jains, while Sikhs numbered 1,481, Christians 95, Aryās 41, and Pārsīs 23. The numerous divisions of the Hindus were not recorded, but followers of Vishnu are said to predominate; there were also 8,598 Bishnois, whose articles of belief have been described at pages 90—91 *supra*, as well as some Jasnāthis. Of the 66,050 Muhammadans, only eighty were Shiahs and the rest Sunnīs; most of them are descendants of Rājputs and, except in some of the large towns, still retain their ancient Hindu customs and ideas. About one-half of the Jains were Dhūndias, more than forty-three per cent. were Swetāmbaras, and the rest Digambaras.

The Alakhgirs.

The most curious religious sect found in the State is that of the Alakhgīrs which, though neither large nor important, is interesting from the fact that it was founded by a member of the despised caste of Chamārs—by name Lālgīr—and numbers high-caste men among its adherents. Lālgīr is said to have been born at the village of Sulkhānia on the Jaipur border and, when five years old, was carried off by a Nāga or military monk, who made him his disciple. Fifteen years later, he returned with his *gurū* who, discovering that he was the son of a Chamār, abandoned him and went through a course of purification. In 1830, Lālgīr journeyed to Bīkaner where he lived in a hut near the western gate of the fort for twelve years, and, when Mahārājā Ratan Singh proceeded on pilgrimage to the Ganges, he accompanied him. On his return, he received a sum of money with which he constructed a fine well at his native village, and he then went back to Bīkaner where, although he made no secret of being a Chamār, he began to gather a following, including one Lachhī Rām, the chief steward of one of the Mahārānīs. He denounced idolatry and taught his disciples to call only on the "Incomprehensible" (*Alakh*), and their sole worship consisted of the repeating of this word *Alakh*. Charity was to be practised; the taking of life, and meat as food, was forbidden, and asceticism encouraged. The only reward held out was the attainment of purity, untroubled contemplation and serenity; there was no future state as all perished with the body, which was finally dissolved into the elements. Lālgīr, on being expelled from Bīkaner for some insolence to the Mahārājā, proceeded to Jaipur, whence he wrote letters calling on his followers to assume the garb of sanctity (the *Bhagwān libās* or clothes of a reddish colour, worn by the Dādūpanthis) and become Jogīs. The order was obeyed, and the cry of *Alakh! Alakh!* resounded everywhere; whereupon Mahārājā Sardār Singh, to put an end to the excitement, directed that all the Alakhgīrs should leave his State. Those of weak faith abandoned the prescribed dress and habits and remained quietly at home, but

Lachhī Rām kept steadfast and was accordingly expelled, his religious books being destroyed. Eventually, however, when Mān Mal, son of Lachhī Rām, became minister (about 1866-67), Lālgīr appears to have been permitted to return and resume his teaching. The Alakhgīrs are chiefly ascetics, though a few are family men; they do not admit Musalmāns, and seem to consider themselves a Jain sect, respecting, though not worshipping, the Jain Rishīs.

Christians.

The Christian community has increased from 14 in *1881* to 21 in *1891* and 95 in *1901*. In the year last mentioned, 51 were Natives, 28 Europeans and 16 Eurasians, and of the Native Christians, thirty-nine were Methodists, eight Roman Catholics and four Presbyterians. With the exception of the last, who were found in the town of Churu, all the Christians, whether European or otherwise, were enumerated in the city or *tahsīl* of Bīkaner, chiefly the former. The State is included in the Anglican see of the Bishop of Nāgpur and the Roman Catholic Prefecture of Rājputāna, but there is no Mission anywhere, and the Native Christians have probably come from outside to earn their living on the railway.

Occupations.

At the last census, 71 per cent. of the people returned some form of agriculture as their principal means of subsistence, another 2·4 per cent. were partially agriculturists, and a further 1·4 per cent., shown under the head of general labourers, were doubtless to some extent supported by work in the fields. The industrial population amounted to 12·52 per cent., and was engaged chiefly in the provision of food and drink (four per cent.), or in the cotton and leather industries, or as dealers in piece-goods, or workers in gold, silver and precious stones. Personal and domestic services gave employment to nearly 3·7 per cent., and commerce to about 2 per cent., while the professional classes, embracing religion, education, literature, law and medicine, as well as actors, singers and dancers, formed 2·4 per cent. Lastly, persons returned as having no occupation numbered 21,827, or 3·7 per cent., and more than four-fifths of them were beggars.

Food.

The majority of the people have four meals a day, namely one in the early morning called *sirāwan*, a second about ten A.M. (*rotī*), a third some four hours later (*dopahārā*), and the fourth (*biālu*) any time after sunset. The staple food of the masses is *bājra*, and the well-to-do often prefer it to wheat; the flour is made up into unleavened cakes (*chapātis*) and eaten with *dāl* and such vegetables as are available, or is boiled down in diluted buttermilk so as to form a porridge (*rābri*). Almost all classes keep cattle and goats so as to secure a ready supply of milk, and the Jāts consume enormous quantities of *ghī* (clarified butter) whenever they can afford it. Tobacco and opium are in general use, and sugar is largely eaten at festivals. In times of scarcity, the poor subsist on the seeds of the various grasses, particularly of that known as *bharūt*.

Dress.

The dress of the people is of the simplest kind and is usually made entirely of cotton cloth. A loin-cloth, a vest or jacket, a turban of sorts, and a loose wrap, thrown round the body like a plaid, are the

common garments of the Hindu cultivator, while the upper classes, at any rate when appearing in public, substitute trousers for the *dhotī* and wear a shirt and a long coat. Among the latter, the style of the turban is more thought of than anything else; the most striking and graceful fashion is that adopted by the Rājputs and officials and called *khirkia*. Merchants of good position wear the *pagrī* in the mode termed *lapeta*, while the smaller ones affect the Nāgaurī or Jaipuria patterns. The dress of the Hindu female consists of a coloured skirt or petticoat, a tight bodice, and a sheet or veil taken over the head and round the body.

Dwellings.

Houses vary in degree from the substantial masonry *hawelīs* of the well-to-do and the mud dwellings of the fairly comfortable to the huts of the poor. The latter, which are made of grass and the twigs and roots of the *phog* bush, are most numerous; they are circular and look like small ricks. Fences of thorns usually surround them, and serve as a protection against the hot winds and sand-drifts, as well as a cattle-pen.

Disposal of dead.

The Hindus as a rule cremate their dead, but the Jasnāthis and Bishnois practice inhumation, burying corpses sometimes at full length but generally in a sitting posture (like the Sanyāsis), and almost always at the threshold of the house or in the adjoining cattle-shed. Among Muhammadans the usual mode of interment is followed.

Amusements.

Amusements are singularly few and, except at the capital, where foot-ball and a certain amount of lawn-tennis are played,the chief games of the younger generation are marbles, blindman's-buff, prisoner's base, kite-flying, tip-cat, etc. Camel racing is indulged in to a certain extent, and polo, pig-sticking and shooting are favourite pastimes of the Mahārājā and those about him. The indoor games include chess, cards and a sort of backgammon, but the monotony of the ordinary village life is varied only by the celebration of one of the festivals, or by a birth, wedding or funeral with its attendant ceremonies.

Festivals.

The principal festivals are the Holī in Phāgan (February-March); the Naurātra (in honour of Devī) and the Gangor (sacred to Gaurī or Pārbatī) in Chait (March-April); the Akhā Tīj in Baisākh (April-May); the Gur Punam in Asārh (June-July), when the Mahārājā proceeds to, and worships the cenotaphs of his ancestors at Devī Kūnd; the Dasahra in Asoj (September-October), which recalls Rāma's conquest of Rāvana; and the Dewāli or feast of lanterns in Kārtik (October-November). Another important holiday is the Mahārājā's birthday (*sālgirah*)—in the present case Asoj *sudi* 10th, *i.e.* in September-October. The Muhammadan festivals are the same as elsewhere, namely the Muharram, the two Ids, and the Shab-i-barat.

Nomenclature.

In the matter of nomenclature Bīkaner differs in no way from the neighbouring States of Rājputāna. The higher and middle classes of the Hindus have two names, the first of which may be that of some god, or a term suggestive of (*a*) auspiciousness and happiness in the case of a Brāhman, (*b*) power and protection in that of a Kshattriya, and (*c*) wealth and prosperity in that of a Vaisya. The second name is usually indicative of the division to which the holder belongs,

e.g. Dān, Dās, Datt, Dayāl, Deo, Karan, Prasād among Brāhmans; almost invariably Singh among Kshattriyas; and Chand, Mal, Lāl, Rāj among Vaisyas. A third name, showing the man's clan, caste or occupation, is sometimes prefixed or added, *e.g.* Rūp Singh Parihār, Purohit Ganga Rām, Mūl Chand Bāgla, Seth Bhagwān Dās, etc. The Sūdras on the other hand usually have but one name which, as pronounced, not infrequently ends in the letter "ō"—for example Manglio, Padmio, Rāwatio.

In the names of places, the suffix—*sar* (meaning salt-lake) seems to be most common, and then—*pura* and—*wāla*, both meaning place or habitation. Such endings as—*garh* (fort) and—*ābād* (settlement) are also found.

CHAPTER IV.

ECONOMIC.

AGRICULTURE.
General conditions.

The greater part of the State is included within the limits of the unproductive and ill-watered tract which stretches north and north-west of the Arāvallis. The southern, central and western portions form a plain of the lightest class of sandy soil, broken at short intervals by ridges of almost pure sand which, in some parts—particularly in the centre and south—attain a considerable height. To the south-west of the capital lies the Magrā, a level expanse of rather stony land which, however, is fairly productive when the rainfall is good, while further to the north (in the south-west of the Anūpgarh *sub-tahsīl*) is an extensive area known as "chitrang" which, in consequence of the excessive presence of natural salts, is unsuitable for cultivation, though *sajjī* and *lānā* plants grow in abundance. The northern limit of the actual desert may be roughly drawn at the old bed of the Ghaggar, which runs in a westerly direction through the Sūratgarh *nizāmat*; light soil is met with for some distance beyond it, but the lofty sand-hills characteristic of the central and western regions cease abruptly on its southern bank. The country beyond the Ghaggar is the most fertile part of the State, the surface becoming more level and less sandy as one proceeds northwards. The soil in the north of the Anūpgarh *sub-tahsīl* and the Sūratgarh *tahsīl* consist chiefly of a light loam, fertile with irrigation and locally known as *baggī*, while more than half of Mirzawāla, especially the northern and north-eastern portions, is a level expanse of good firm loam (*kāthi*) which in places becomes clayish. The loamy soil stretches right across the upper portion of the Hanumāngarh *tahsīl* to the Hissār border, improving, if anything, as one goes eastward; it is of a yellowish tinge (*pīli mitti*), retains moisture well and, with proper irrigation, would be capable of producing the highest classes of crops. In a few villages in the north-east of Hanumāngarh there is some light uneven soil (*maira*), the relics probably of an ancient drainage line locally called Naiwāl. Proceeding south, we come to the bed of the Ghaggar which throughout its length is a stiff loam, becoming darker in colour and harder, and containing more clay as it approaches Hissār; in the vicinity of Hanumāngarh, the action of the floods in carrying off the silicious particles has made the soil almost entirely a clay which cannot be cultivated unless well moistened. The area of the Ghaggar bed is known as the *nāli*, and the tract on either side as *dhora* or *rohī* according as the quantity of light sandy soil is respectively greater or less. The Nohar and Bhādra *tahsīls* are fairly level, though sand-hills of no great height occur here and there, but the latter become less frequent as the eastern boundary is approached, and the soil is for the most part a good loam well adapted by a

sufficient admixture of sand to the conditions of the local rainfall. Further to the south (in Rājgarh) sandy ridges and light soil are common, while to the west and south-west lies the desert proper.

System of cultivation.

As would be expected from the almost entire absence of artificial irrigation, the agricultural methods employed are of the simplest description. For the *kharīf* or autumn crop, only one ploughing is given, and the seed is sown at the same time by means of a drill (*por*) attached to the rear of the plough. In the light and more sandy soils, the labour of ploughing is very small, and with a camel one hundred *bīghas* (or about thirty-seven acres) can be ploughed and sown for the *kharīf* at the rate of five *bīghas* (or nearly two acres) a day. In the loamy tracts, the area would be slightly less, but more time would be available for the tillage of the heavier soil as moisture would be better retained in it. The ploughing is of the roughest description, especially in the more sandy regions, and the various vicissitudes to which the crops are subject give little inducement to careful cultivation. High winds often cover the sown fields with a layer of sand and thus prevent the germination of the seed, or, by carrying away the light soil, leave the young plants exposed and cause them to wither up. If sufficient moisture is left, sowing has to be undertaken afresh. Rotation of crops is unknown in the sandy tracts, and a field is, as far as the seasons allow, cultivated continuously until the soil shows signs of being exhausted, when new land will be broken up or a previously abandoned field recultivated. It is for the above reason that a considerable portion of the individual cultivator's holding consists of waste or fallow land. Very little attention is paid to weeding in the *kharīf*, except perhaps in the more loamy soils. As the crops begin to ripen, the people usually take up their abode temporarily in huts (*jhonprīs*) in their fields so as to keep off birds and wild animals, and they remain there till the harvest has been gathered and taken to the threshing-floor (*khālī*).

More trouble is taken in the cultivation of the *rabi* or spring crop in the loamier soils. The land receives two preliminary ploughings (*phār* or *chīr* and *chok* or *dohār*) at right angles to each other, and is harrowed and levelled after each with a flat board (called *sohagga*) in order to keep in the moisture. The seed is sown with the drill at the third ploughing (*tihār*), and considerable attention is paid to weeding; occasionally a shallow channel (*khāl*) is dug in order to carry rain water from higher lying adjacent waste land to the field. Land devoted to *rabi* crops is called *umra* and is, as far as possible, always sown in the succeeding *kharīf* so as to obtain the full advantage of the superior tillage it has received.

Agricultural population.

Nearly 420,000 persons, or 71¾ per cent. of the population, were returned in 1901 as dependent on pasture and agriculture; and the actual workers included in these groups numbered 51½ per cent. of the male, and nearly 38 per cent. of the female population of the State. In addition to these, more than 14,000 persons recorded agriculture as a subsidiary occupation. The great cultivating classes among the Hindus are the Jāts and Mālis (the latter of whom are not very

numerous), and among the Musalmāns the Rāths, Johiyas and Bhattis, all of whom, however, devote more of their time to their cattle than to tilling the soil. For the rest it may be said that almost everywhere Brāhmans, Chamārs, Kumhārs, Mahājans, Rājputs, Telis, etc., will be found practising agriculture, sometimes as their sole means of subsistence, and sometimes in conjunction with their own peculiar trade.

The two harvests.

In by far the greater portion of the State, there is only one harvest (the *kharīf*), and the principal crops are *bājra*, *moth*, *jowār*, *til*, and a little cotton. The cultivation of *rabi* or spring crops, such as barley, gram, rape-seed and wheat, may be said to be practically confined to the Sūratgarh *nizāmat* in the north and portions of the Reni *nizāmat* in the east. The autumn harvest is of course the more important as the people depend almost entirely on it for their annual food supply, and it has been estimated that the proportion of out-turn of food grains from *kharīf* to that from *rabi* is roughly as nine to one. The population is so scattered that one bumper crop will feed them for three or even four years, and a total failure of the *kharīf* would not cause very great suffering unless it succeeded several partial failures.

Agricultural statistics.

Agricultural statistics are available from 1898-99, but only for the greater portion of the *khālsa* lands are those paying revenue direct to the State ; their area is liable to fluctuation, but may at the present time be put at 7,372 square miles or rather less than one-third of that of the entire territory. The area for which returns exist has varied from 6,457 to 6,612 square miles and during the last nine years has averaged 6,506 square miles ; if from this be deducted 120 square miles not available for cultivation, the culturable area would be in round numbers 6,390 square miles. The area actually cropped has ranged between 1,274 square miles in *1898-99* and 5½ in the disastrous famine year of 1899-1900, but the annual average for the succeeding seven seasons has been nearly 877 square miles (or between one-seventh and one-eighth of the area available for cultivation), of which only about thirty square miles (or 3·4 per cent.) were irrigated.

Turning now to the areas under the various crops, we find that the annual averages for the past seven years were (in square miles) :— *bājra* 271 ; barley 53 ; gram 35 ; wheat 16 ; *jowār* 7 ; other food grains and pulses, principally the latter (*moth* and *mūng*) 365 ; *til* and two or three species of oil-seeds 86 ; and miscellaneous food and non-food crops, such as condiments and spices, tobacco, cotton, Bombay hemp and vegetables, about 44. Some further details will be found in tables Nos. LVIII and LIX in volume III-B.

Bājra.

Bājra or spiked millet (*Pennisetum typhoideum*) is undoubtedly the most important crop of Bīkaner, and its quality is highly lauded ; it can be sown as early as Jeth (May-June), but the more usual time is Asārh-Sāwan (from the middle of June to that of August), and it is found that, if sown after the end of July, the yield is poor. It is neither irrigated nor manured, but ripens quickly, *i e.* within three months, and the out-turn is estimated at from 2½ to 3¾ cwt. per acre. The stalks (*karbi*), though of no value as fodder, are used for thatching purposes.

Moth.

A species of the kidney bean called *moth* (*Phaseolus aconitifolius*) comes next in importance; it can be sown up to the middle of September, takes about sixty days to ripen, and does best in a light soil. The yield per acre is much the same as that of *bājra*, and the stalks (*guna*), leaves and pods (*pālosi*) supply good fodder for camels.

Jowār.

Jowār or great millet (*Sorghum vulgare*) is not very common and, as it requires a rather stiff soil, is found chiefly in the Sūratgarh *nizāmat* in the north, and to a less extent in Reni in the east. It is generally sown later than *bājra* takes longer to come to maturity, and is sometimes irrigated; the out-turn is about four cwt. per acre. When intended as a fodder crop, the seed is sown thickly and, as the crowded plants grow tall and thin, the stalks are much less woody than those of a crop grown specially for seed and are greatly appreciated by cattle.

Barley and gram.

The cultivation of barley and gram is practically confined to the Sūratgarh and Reni *nizāmats* where irrigation is available. These crops are grown sometimes alone and sometimes mixed; they are sown about the middle of October, receive one or two waterings, and are harvested in February or March. The average yield of barley is six or seven cwt. of grain per acre, while that of gram is nearly five cwt. of pulse; the fine chaff (*bhūsa*) of either makes excellent fodder.

Wheat.

Wheat is grown chiefly in the flooded *nāli* area in the neighbourhood of Hanumāngarh; the crop is generally sown in October-November, and the out-turn is about six cwt. per acre. The chaff provides a fairly good fodder which is much improved when mixed with that obtained from gram and other pulse crops.

Oil-seeds.

The oil-seeds comprise *til* (*Sesamum indicum*) in the autumn, and *sarson* or mustard (*Brassica campestris*) and *tārāmira* or rape-seed in the spring. The first does well in the more level and loamy soils; the seed is usually sown broadcast in July or August, and the crop ripens in about ten weeks, yielding from two to three cwt. per acre. The oil is extracted by the village Telis and is largely used in native cookery, but the stalks and chaff have no fodder value. Mustard is not very common, but rape-seed is cultivated on a large scale in the north, and is often sown among the growing *kharīf* crops. As it requires but little tillage and no weeding, it is a favourite crop with the lazy Musalmān cultivators of Mirzawāla and Hanumāngarh; the ordinary out-turn per acre of mustard and rape-seed is about the same, namely between 3½ and 4 cwt.

Fibres, etc.

There are usually a few acres under cotton and *san* or Bombay hemp (*Crotolaria juncea*), and a coarse kind of tobacco is grown to a small extent in the Bhādra, Rājgarh and Sūjāngarh *tahsīls*.

Fruits and vegetables.

The principal fruits are the watermelon (*matīra*) and a coarse kind of melon called *kākri*. The former seem to spring into existence during the rains and are so plentiful that great quantities are thrown to the cattle; the seeds are pounded into a kind of flour which is mixed with that of cereals. Of this fruit Elphinstone wrote thus:—"In the midst of so arid a country, the watermelon

the most juicy of fruits, is found in profusion. It is really a subject of wonder to see melons three or four feet in circumference growing from a stalk as slender as that of a common melon in the dry sand of the desert. They are sown and perhaps require some cultivation, but they are scattered about, to all appearance, as if they grew wild. The natives assert that a large melon suffices to allay the thirst of a horse and his rider." Among vegetables, the radish (*mūli*) is most easily raised, but carrots and onions are grown at Ratangarh and several other places.

Agricultural loans.

The Darbār has for some years been advancing money to the cultivators to enable them to purchase seed and plough-cattle; the sum advanced in a normal year is about Rs. 20,000, and is of course much greater in adverse seasons, *e.g.* about Rs. 27,000 in 1891-92 and more than Rs. 85,000 in 1899-1900. In some cases these loans are free of interest, but ordinarily a rate of six per cent. per annum is charged.

Indebtedness.

Prior to 1899, the agriculturists were generally well off, but the last unprecedently severe famine hit them very hard, although the Darbār spared no efforts to relieve them, and the majority are more or less in debt. Much has been done during the past four or five years to help them by remitting a large sum representing arrears of revenue and in other ways and, though recent seasons have been none too favourable, a slow but steady improvement in their material condition is noticeable. The creditors of the cultivators are, as a rule, professional money-lenders who charge interest at rates ranging from about eighteen to thirty-six per cent. per annum, or even higher.

Live stock.

Cattle, sheep and camels are an important part of the wealth of the agricultural population throughout the State, and in the almost uncultivated parts in the north-west and west they form practically the only source of income of the pastoral tribes found there. The whole of Bīkaner may be said to be a vast pasture ground; the grazing about Hanumāngarh (the old Bhatner) is famous, and that on the banks of the Chhāpar lake in the south-east vies with it in friendly rivalry for first place—hence the saying *Chhāpar kā chaupā Bhatner nā chāhwe*, meaning "the cattle of Chhāpar love not Bhatner".

Cattle.

The finest cattle come from the north, where animals coloured and spotted like the English breeds are often met with; the cows of Pūgal in the west are famous for their milk, and the buffaloes of Hanumāngarh are said to be particularly good. Most of the heifers are retained, while the steers are usually kept for three or four years and then sold ungelt for Rs. 15 or Rs. 20 apiece to travelling traders or at the Gogāno fair; male buffalo calves are taken to the Punjab where they fetch about Rs. 15 each and are used for draught purposes. The average net profits from a cow have been roughly estimated at from Rs. 10 to Rs. 15 per annum, and from a female buffalo at from Rs. 20 to Rs. 25.

Sheep.

Sheep are kept principally for their wool, but are exported in considerable numbers; those of western Bīkaner are among the

largest in India, and the wool is much prized, especially for carpet weaving. Attempts are being made to improve the breed of sheep by importing merino rams from Australia.

Camels.

The camel is used in a variety of ways, and is looked on by the agriculturist more as a member of the family than a dumb animal. He is harnessed to the plough (where he is far more useful than a bullock would be in the light sandy soil); he carries water, grain, etc., and is let out on hire; he is both ridden and driven; a fair profit is made from the sale of his wool; and, when he dies, his skin is made into jars or bottles for holding *ghī* and oil. The riding camels were formerly famous for their size, strength and speed, but they appear to have deteriorated somewhat of late and, to encourage breeding, a fair is held yearly at the capital in the cold weather.

Horses.

Horses and ponies are not now bred in large numbers, and are in no way remarkable. Thirty years ago, the Darbār maintained stud-farms at Chhāpar, Hanumāngarh and Johar (six miles south-east of the capital), and the horses were described as excellent; the farm at Johar was the largest, and accommodated three hundred mares. These institutions were, however, closed in 1896.

Fairs.

The principal fairs are (i) the Gogāmeri, held at Gogāno in the Nohar *tahsīl* in August and September, which is largely attended, and at which many bullocks change hands; (ii) that at Kolait in October-November; and (iii) that at the capital itself, which was once held in February but has now been fixed for the first half of November.

Irrigation.

Up to 1897 artificial irrigation was practically unknown in Bikaner. A few plots in the Sūjāngarh and Reni districts were watered from *kachchā* wells, and small areas in the Bhādra and Mirzawāla *tahsīls* were occasionally irrigated from the Western Jumna and Sirhind canals respectively, but, as the supply was never great and the time at which it would be available was always uncertain, the results were unimportant. The Ghaggar floods irrigated by natural flow a small portion of the *nāli* tract which, however, did not generally extend beyond a point two or three miles west of Hanumāngarh; and the Kātli river sometimes benefited a few Rājgarh villages in the east. Since then, the Ghaggar canals (described below) have been constructed and the average annual area irrigated in the *khālsa* portion of the territory during the seven years ending 1906-07 has been thirty square miles, namely about thirteen from canals, rather less than one from wells, and the rest from other sources.

The Ghaggar canals.

The Ghaggar, as already observed, is for the greater part of its length a river of the Punjab; it is not a perennial stream, but depends on the monsoon rainfall for its supply. At present every village through which it passes in its upper course diverts a portion of its waters for irrigation, and no less than 10,000 acres in the Ambāla District alone are supplied from this source. The embankments thus erected check the course of the stream, while the consequent deposit of silt, greatly facilitated by the dams, has permanently diminished the power of the water to force its way across the dead

level of the Karnāl or Patiāla plains. Near Jakhāl station on the Southern Punjab Railway, a District canal, the Rangoi, takes off from the main stream, and irrigates an average of 12,000 acres annually. The Bīkaner Darbār constantly complained that the dams constructed in Hissār prevented the water of the river from entering its territory, and eventually (in 1897) it was decided to build a weir at the lower end of the Dhanūr lake at Otu, flanked by two canals, one on the northern and the other on the southern bank. The work was completed at a cost of nearly 6·2 lakhs, towards which the Darbār contributed about 2·8 lakhs, but, in addition to this sum, the State spent 1·84 lakhs on that portion which was carried out by famine labour and a few thousand rupees since, so that altogether these canals have cost Bīkaner approximately 4¾ lakhs.

The following are some of the main details of the project. The weir at Otu has a length of 319 feet, and is divided into fourteen bays at twenty feet each; the piers, three feet in thickness, support a road-way fourteen feet wide, and also carry the rolled beams against which the needles rest. In order to unwater the lake, the crests under the two central bays have openings, four feet in width, down to the level of the bed, and during floods all the bays are completely opened up when necessary. On the southern side of the lake is an embankment about two miles in length, which forms the left retaining wall, while on the northern side the banks are much higher, and a series of mounds, connected together by dams, constitutes the right retaining wall. The two canals are nearly 95 miles in length (51 miles in Bīkaner and about 43½ in British territory), and have more than 23 miles of distributaries.

The canals were managed by the Punjab Irrigation department from 1897 to the 31st March 1904, and during these seven years the average annual area irrigated in Bīkaner was about 6,592 acres (4,722 in the *kharīf* and 1,870 in the *rabi*). The total amount paid to Government for maintenance, repairs, management, etc., was approximately Rs. 53,000 (or Rs. 7,600 a year), while the receipts, after deducting remissions, were shown as Rs. 69,000 (or, say, Rs. 9,900 a year). In other words, the net profit was only Rs. 2,300 per annum, or but ½ per cent. on the capital outlay. The Darbār assumed charge of the canals within its territory on the 1st April 1904, and during the succeeding twelve months 11,379 acres were irrigated, namely 10,696 in the *kharīf* and 683 in the *rabi*. The revenue, after deducting remissions, amounted to Rs. 25,637, while the working expenses, including the cost of extending the southern canal, were Rs. 16,394; there was thus a net profit of Rs. 9,243, or about two per cent. on the capital outlay. The year 1905-06 was one of the worst in the history of the canals; only 3,023 acres received water, and the supply was badly distributed, practically nothing being brought in during August. The result was that large remissions became necessary, and the revenue fell to Rs. 3,710 while the working expenses were Rs. 13,518. In the pastyear (1906-07), rather more than 9,503 acres were irrigated, and the gross revenue, after deduct-

ing remissions, was nearly Rs. 20,639; working expenses amounted to Rs. 9,593, and the net profit was consequently Rs. 11,046, or 2½ per cent. on the capital outlay.

Tanks, etc.

In addition to the canals just described, other irrigation works have received attention, notably a tank at Madh in the south-west, which has recently been completed at a cost of about Rs. 22,000 and should be capable of storing water sufficient for 550 acres, and another a little to the north, between the villages of Motāwat and Pilāp. There appear to be about four hundred irrigation wells (chiefly *kachchā* or unlined) in the *khālsa* portion of the State, and practically all of them are to be found in the Reni and Sūjāngarh districts, where water is fairly close to the surface. A few projects are still under consideration, by far the most important being a canal from the Sutlej which, if carried out, will be of incalculable benefit to the Sūratgarh *nizāmat.*

Rents.

Rents in the ordinary significance of the term do not exist except in the Tibi villages (granted in 1861 by the Government of India to Mahārājā Sardār Singh as a reward for his services during the Mutiny), where the *zamīndārs* have transferable rights and the State is entitled to a certain percentage of the total assets. The rents taken by the landlords of Tibi from their cultivators are sometimes in cash and sometimes in kind; cash rents are said to average about six annas per acre of dry land and R. 1-3 per acre of wet land. In the rest of the *khālsa* territory, the Darbār possesses proprietary rights, and deals directly with the cultivator or the joint village body.

Wages.

Some thirty years ago, it was reported that four annas a day for skilled, and two annas for unskilled labour were the normal rates of wages in Bīkaner, and, as regards the latter, there seems to have been little or no variation. The ordinary day labourer still receives about two annas, and the syce or horsekeeper three; the wages of others appear to have increased, namely those of the blacksmith from four to five, and of the carpenter and mason from four to six annas. As elsewhere in Rājputāna, the village servants such as barbers, potters and shoemakers are usually paid in kind at harvest time.

Prices.

Table No. LX in Vol. III-B. shows the average retail prices of certain grains since 1872 and of salt since 1873 in the State as a whole; it will be seen that, leaving salt out of account, there has been no marked variation except in years of famine or scarcity. Taking first *bājra*, the staple food of the people, we find that the price has ranged from ten seers (or slightly less) per rupee in 1896-97 and 1900 to more than twenty in 1882 and 1893, and as much as thirty-one seers in 1876. In his *Gazetteer of Bīkaner* (published in 1874) Colonel Powlett wrote that "the people consider a famine has begun when *bājra* is at fifteen seers," but the average for the succeeding twenty years (which included only one really bad season) was 16½ and the ordinary rate nowadays may be said to be between fifteen and sixteen seers. No figures are available for *moth* which is largely consumed, but it is almost always cheaper than *bājra*. Gram and wheat are chiefly imported; the former was cheapest in 1876, 1893-1894 and 1904 (between twenty and twenty-two seers per rupee), and

dearest in 1897 and 1900 (8·8 and 9·6 seers respectively), while wheat has ranged between 8 and 14¾, with a general average of eleven or twelve seers. The price of salt is regulated by its quality, the rate of duty and the cost of transport. Prior to 1879, the local variety was considered sufficient, and from 43 to 74 seers were procurable for a rupee, but subsequently the commodity has been imported from Dīdwāna and other sources in Jodhpur, and prices have varied between 11 and 20½ seers per rupee.

The general steadiness in the price of food grains is largely due to the railway, the first section of which was opened at the end of 1891; its benefits are specially noticeable in times of drought, when it pours in grain from the Punjab and Sind. Just before the famine of 1868-69, *moth* was selling at 45, and *bājra* at 35 seers per rupee, while during that visitation prices rose to six seers; on the other hand, the highest quotations in the famine of 1891-92 and the terrible calamity of 1899-1900 were between eight and nine seers.

MINES AND MINERALS. Coal.

The principal mineral worked in the State is coal, or rather lignite of a dark brown colour; it was discovered in 1896 while sinking a well at Palāna, about fourteen miles south of the capital. An analysis made in the Geological Survey laboratory gave the following result:—

Moisture	8·20
Volatile matter	42·72
Fixed carbon	39·28
Ash	9·80
	100·00

thus indicating a fuel that would burn rapidly on account of the large amount of volatile matter but would be somewhat deficient in heating power. Operations were started in 1898, and the colliery was connected with the railway in 1899 by a siding nearly ten miles long. The seam is over 20 feet in thickness, 250 feet below the surface, and 50 feet above the water-level; more than two million tons of coal are said to exist, and only in one direction has the deposit shown signs of exhaustion. The industry has grown steadily year by year, as will be seen from the following figures representing the annual output in tons:—511 in *1898*; 4,249 in *1899*; 9,250 in *1900*; 12,094 in *1901*; 16,503 in *1902*; 21,764 in *1903*; and 45,078 in *1904*. From the 1st November 1904 the colliery was leased to a company, and the out-turn in 1905 fell to 42,964 tons; this arrangement continued till the 1st April 1906, when the Darbār resumed management. The output in 1906 was 32,372 tons, and in 1907 only 28,062 tons. The total capital expenditure (excluding the cost of the railway siding) was about 1·71 lakhs to the end of September 1907, and during the twelve months terminating on that day the gross earnings were Rs. 76,480 and the working expenses Rs. 51,822, leaving a net profit of Rs. 24,658, or about 14·4 per cent. on the capital outlay. In 1904-05, when the

capital expenditure amounted to a little more than a lakh, the net earnings exceeded Rs. 70,400, or a net profit of seventy per cent.

The colliery gives employment to about 230 labourers—chiefly Jāts, Chamārs (or Dheds) and Thorīs—and the daily wages range between six and seven annas. The cost of extraction is approximately Rs. 2 per ton, and the average selling price at the mine head is nearly Rs. 3. The mineral is, however, of inferior quality, disintegrating rapidly and becoming very friable when exposed to the atmosphere; it is consequently not well fitted for use in locomotives as the small fragments and dust are liable to choke the boiler tubes. Attempts made to manufacture briquettes in order to reduce the proportion of moisture and render the fuel less susceptible to atmospheric action have so far been unsuccessful. The Palāna coal is largely used by the Public Works department of the State and, when mixed with the Bengal variety, on the Jodhpur-Bīkaner Railway; a certain amount is exported to the Punjab.

Salt.

The salt-lakes at Chhāpar and Lūnkaransar have already been mentioned in Chapter I. By the agreement of 1879 between the Darbār and the British Government, the manufacture of salt is confined to these two places, and the total aggregate out-turn in any one year is never to exceed 30,000 maunds, or about 1,100 tons. The Lūnkaransar source alone is worked now, and the average annual amount manufactured during the last five years has been 650 tons. The depression is about two miles in length by 1½ in breadth; the surface is sandy with an underlying stratum of tenacious dark grey clay, below which (at a depth of about fourteen feet) are springs of brine varying in density from 13° to 20° Beaumé. Excavations in the shape of pits are made down to the spring level, and the salt is produced in large solar evaporation pans of a rectangular shape and about fifty feet square; these are constructed by removing the sandy surface and excavating the required area in the clay substratum to a depth of about twelve inches. Two brine condensers in connection with each pan are erected on a somewhat higher level, and the brine is lifted from the pits into them by means of the weighted pole and bucket and is then allowed to flow into the pans. A crop is obtained in ten or twelve days during the summer months, but the salt is of small grain and somewhat discoloured by the clay of the beds of the pans and by blown sand; it is consumed only by the poor or used for curing skins and other antiseptic purposes.

Sandstone.

Excellent red sandstone is quarried near Dalmera on the railway, forty-two miles north-east of the capital; it is admirably adapted for fine carving, and has been used for the new palace (Lālgarh), the Victoria Memorial club, and several other buildings at the capital. By the aid of a three-ton crane erected in 1899-1900, the output has greatly increased and is now about 4,000 tons a year; the stone has since 1903-04 been exported to Bahāwalpur, Bhatinda and other places in the Punjab. The sale proceeds in 1906-07 were Rs. 12,847 as compared with Rs. 10,587, Rs. 14,019 and Rs. 10,966 in the three preceding years. Sandstone is also found in the Sūjāngarh

tahsīl but, being inferior to the Dalmera variety, is only used locally.

Limestone and clays.

Limestone is plentiful in several localities, but is often soft and does not make good lime. There are, however, quarries of sweet lime (*mītha chūna*) near the capital, Sardārshahr, Jāmsar railway station, etc.; the lime is made by burning a peculiar kind of clay excavated from the sand-hills and, as it sets very quickly, is largely utilised for building purposes. Red and white clays are abundant; the former is used for plastering *kachchā* houses to make them water-tight, and the latter as a whitewash or in the manufacture of china bricks and tiles. Lastly, there is the well known yellow clay, quarried near the village of Madh in the south-west, which is sometimes called *Multāni mitti* (fullers' earth) and sometimes *Gajni* from Gajner in the vicinity. The annual output is about 1,000 tons, of which 850 tons are exported, chiefly to the Punjab. Locally it sells at one anna per maund (82lbs.) and, being greasy, is popular as a hair wash; in the Punjab it is used for the manufacture of the better grades of pottery and, a century ago, the ladies of Cutch are said to have eaten it to improve their complexions.

Copper.

The only metalliferous mineral yet found in Bīkaner is copper. Tod mentions two mines, one at Bīramsar and the other at Bīdāsar (both in the south of the State), and wrote that the former did not "repay the expense of working", while the latter, "having been worked for nearly thirty years," was "nearly exhausted." According to the local chronicles, the mine at Bīdāsar was discovered in 1753, and was never a paying concern owing to the absence of proper appliances for keeping down the water.

MANUFACTURES.

The principal manufactures are woollen fabrics, carpets, ivory, bracelets, pottery, lacquer-ware, leathern water-bags, and sweetmeats. Of these, the *lois*, or woollen shawls, are of very fine texture, and the carpets are famous; the latter are woven at the Central jail and in a special factory recently established close by. The ivory bracelets are often tinted with gold or silver, while the pottery consists chiefly of household utensils made of the red clay or marl already referred to. Work in lac is practically confined to such small articles as toys, bangles, stools and the legs of beds, but lacquer or some similar varnish is also used in the decoration of doors and of the interior walls of houses, and is applied to skin oil-flasks (*kuppīs*). Bīkaner city has long been noted for its beautifully white sugar-candy, crystallised on a succession of strings introduced into earthen pots; the sugar is of course imported and, in refining it, rain-water is used, that of the wells producing an indifferent variety. Among other industries may be mentioned the weaving of coarse cotton cloths and rugs (*darīs*), and of grain bags of goats' hair, and the manufacture of camel saddlery.

COMMERCE AND TRADE.

The transit trade of Bīkaner was at one time considerable. Rājgarh was the great commercial mart and the *rendezvous* for caravans from all parts. Hither came the produce of the Punjab and Kashmīr *viâ* Hānsi and Hissār; silks, fine cloths, indigo, sugar, iron and tobacco

from the eastern countries *viâ* Delhi and Rewāri; opium from Hāraoti and Mālwā; wheat, rice, silks, dates and dried fruits from Sind and Multān; and spices, tin, drugs, cocoanuts and ivory from Pāli. Much of the above was for internal consumption or use, but the bulk merely passed through the State which thus derived a considerable revenue by levying transit-duty. Towards the end of the eighteenth century the predatory habits of the Rāths, who had cut off all communication with the Punjab, and the general misgovernment which prevailed deterred merchants from visiting this State, and almost all the caravans from Multān, Bahāwalpur and Shikārpur adopted some other route. One of the chief advantages secured by the treaty of 1818 with the British Government was the protection of the "transit trade to and from the countries of Kābul and Khorāsān, etc." The Mahārājā agreed to a scale of duties to be charged on goods passing through his State by the route of Sirsa and Bahāwalpur, and bound himself to keep the roads secure so that merchants might travel with protection and safety and meet with no impediment. In 1844 the transit-duties on the above route were lowered, but nothing further was done to encourage trade during the next forty years. Besides levying import, export and the ordinary transit-duties, the Darbār taxed goods that were being moved from one part of the State to another, and a number of petty, though vexatious, cesses existed. The duties varied in different localities, being highest at the capital, and were collected not only by officials of the department but by commission agents who received a nominal fee.

A radical alteration was made in 1884-85. In lieu of the various internal and external cesses, one fixed rate was established and levied once for all at the frontier; the revised tariffaimed at enhancing the duty on luxuries and lowering it on necessaries. The new system proved an unqualified success, and the receipts in 1885-86 amounted to more than 5¼ lakhs (or 1½ lakhs more than was anticipated) as compared with a revenue varying from one to three lakhs in previous years. Subsequently, further changes were introduced, the duty being in some cases remitted and in others reduced; the railway has also assisted in the development of trade, and the customs revenue has been as much as nine lakhs, though the annual average during the last three years works out to about 7¼ lakhs. The actual figures for 1906-07 were Rs. 8,34,430. The chief exports are wool, woollen carpets and rugs, rape-seed, sugar-candy, soda, saltpetre and fullers' earth to Bombay, Calcutta, Jaipur, Jaisalmer, Nāgaur and several places in the Punjab such as Bhiwāni, Delhi and Sirsa. The imports include cereals from the Punjab, Sind, Agra and Jaipur; piece-goods from Bombay, Calcutta and Delhi; rice from Sind and Amritsar; sugar and molasses from Bhiwāni, Cawnpore, Chandausi and Ghāzipur; cotton from Jaipur, Jodhpur and Sind; opium from Kotah and Mālwā; tobacco from Sind and Jaipur; and iron and other metals from Bombay, Calcutta, Karāchi and the Punjab. The exports and imports are mostly carried by railway; camels are, however, used in conveying goods to and from Bhiwāni and Hissār.

The chief centres of trade, besides the capital, are Bhādra, Bīdāsar, Churu, Dūngargarh, Nohar, Rājaldesar, Rājgarh, Ratangarh, Sardārshahr, Sūjāngarh and Sūratgarh; and the principal trading castes are the Agarwāl, Mahesrī and Oswāl Mahājans, the Khattrīs, the Brāhmans and the Sheikhs.

MEANS OF COMMUNICATION. Railways.

The railways found in this State are the Southern Punjab and the Jodhpur-Bīkaner. The former is on the broad, or 5ft. 6in. gauge, was built by an assisted company, and has been worked by the North-Western Railway since 1897; its length within Bīkaner limits is, however, barely four miles (in the extreme north). The Jodhpur-Bīkaner system has already been briefly noticed at page 120 *supra*; it is on the metre gauge (3′ 3⅜″), is owned partly by Government and partly by the States of Jodhpur and Bīkaner, and is worked by a special staff employed by these two Darbārs. The portion which belongs to Bīkaner has a length of 245·35 miles, of which 33·35 miles lie in the Punjab, and was constructed between 1889 and 1902. The first section from the Jodhpur border to Bīkaner city was opened in December 1891, and the extensions to Dalmera, Sūratgarh and Bhatinda in Hissār were completed in 1898, 1901 and 1902 respectively. There are altogether twenty-four stations on this length. The capital outlay to the end of 1907 was rather more than 55 lakhs, and the mean percentage of net earnings thereon since 1892 has been 5·12, with a minimum of 2·16 in 1901 and a maximum of 10·87 in 1905. In 1907, the gross working expenses (including a sum of 1¾ lakhs placed in a sinking-fund to meet the cost of heavy renewals) were Rs. 5,44,236, the gross earnings Rs. 8,82,608, and the net receipts Rs. 3,38,372 or a profit of 6·13 per cent. on the capital outlay. Further details will be found in Table No. LXI in Vol. III-B.

It is proposed to construct a branch line from Degāna—a station forty-six miles west of Kuchāwan Road (in Jodhpur) to Hissār on the Bhatinda section of the Rājputāna-Mālwā Railway, and thus open up the important towns of Dīdwāna and Lādnun (in Jodhpur) and Sūjāngarh, Ratangarh, Churu and Rājgarh (in Bīkaner). The project has just received the sanction of the Secretary of State, and work has been started. The length will be about 190 miles, namely 60 in Jodhpur, 101 in Bīkaner, and 29 in British territory; the last section is to be built by the Bīkaner Darbār. The cost of construction has been roughly estimated at between Rs. 16,000 and Rs. 19,000 per mile, inclusive of rolling-stock.

Roads.

The metalled roads are all at, or in the vicinity of, the capital, and their length has increased from 21½ miles in *1896* and 35½ in *1901* to 59 at the present time. All were constructed by the Darbār, and are kept in good repair at an annual cost of about Rs. 21,000. The principal roads are those to Gajner (20 miles) and to Devī Kūnd and Sheo Bāri (10½ miles). Elsewhere, a journey involves a struggle through heavy sand which, however, in the tracks of carts and camels, is beneath the surface somewhat hardened by pressure. Goods are of course carried on camels, but the roads though heavy, are quite passable for carts if sufficient traction power be applied.

Post and telegraph offices.

In former times, the Darbār maintained its own establishment of postal runners (called *kāsids*), and the speed at which these men accomplished long distances on foot was marvellous. Assisted by a camel for only one-fourth of the distance they regularly travelled 170 miles (between Bīkaner and Jaipur) in three days and three nights for which they received Rs. 9, but they could, if necessary, do the journey in forty-two hours and in such cases Rs. 32 would be paid. Two of them usually travelled together in case one should break down. Captain Burton, who was Political Officer here some thirty odd years ago, wrote thus on the authority of the *jemadār* of the postal establishment :—"The quickest rate at which a *kāsid* on foot has been known to travel in this country is fifty *kos* (85 miles) in eight *pahārs* (twenty-four hours). This was some years ago. Now a first-rate *kāsid* will not do more than forty *kos* (68 miles) in that time. The average rate on foot is forty or fifty miles without stopping."

The earliest Imperial post offices were those at Churu, Ratangarh and Sūjāngarh, and they were in existence in 1872. Bīkaner city had also a post office at that time, but it was not directly under the Deputy Postmaster-General, though he was consulted as regards the appointment of the contractor who conveyed letters from Sūjāngarh. An Imperial post office was first opened at the capital in July 1884, and Reni and Sardārshahr received offices in the following year. The Darbār adopted Imperial postal unity in January 1904, and there are now twenty-nine Government post offices and four telegraph offices in the State (see Table No. LXII), in addition to the telegraph offices at the railway stations. The establishment kept up for escorting the mails costs the Darbār about Rs. 5,000 or Rs. 6,000 a year.

FAMINES.

In a desert country like Bikaner, where the rainfall is always precarious and there is practically no artificial irrigation, famines and scarcities are not uncommon visitors. A general famine is expected once in ten years, and a local failure once in four; extensive emigration is the accustomed remedy as nearly every poor man is a cattle owner and must move off quickly to save his stock.

Early visitations.

The first famine of which there is any mention was that of 1755-56, when the distress is said to have been severe. The Mahārājā was absent at Jaipur, but he sent some of his officials to Bīkaner to arrange for a daily distribution of food, and the city wall, which was built at this time, must have given employment to many people. Throughout Ratan Singh's rule (1828-51), there were only two years of plenteousness, namely 1836 and 1837, while 1834 and 1849 were those of actual famine; another disastrous year was 1860, but no details of the measures adopted to give relief have been recorded.

Famine of 1868-69.

Nowhere was the famine of 1868-69 felt more severely than in Bīkaner. Early in October 1868 the starving people began to flock into the towns, and the Seths started small relief funds which were soon exhausted, but a certain amount of cooked food was distributed daily. The Mahārājā did little to assist his subjects beyond establishing a kitchen at the capital, and it had shortly to be moved several

miles away in consequence of the number of dead and dying; the only relief work was a small tank which, after giving employment to a few people for a short time, was closed for want of funds. The Darbār's engagement to remit transit-duties on grain was to a great extent disregarded, and the distress was augmented by the officials endeavouring to collect the land revenue and imposing excessive fines, and by other modes of raising or saving money, such as the seizure of grass and grain for Rāj purposes, the arbitrary reduction of the price current, etc. It was estimated that the State lost permanently more than one-third of its population and nine-tenths of its cattle; in a village in the west, belonging to one of the principal Thākurs, only two hundred cattle remained out of a herd of 4,300 alive before the famine. The price of grain rose gradually to six seers per rupee, there being but little difference in the rates of the various kinds, and water was almost everywhere scarce.

Famine of 1891-92.

The next famine was in 1891-92, when the area affected was 15,340 square miles, mostly in the north, where the *kharīf* failed for the eighth year in succession. Owing, however, to the migratory habits of the people, the well-considered relief measures, a good wheat crop in the spring of 1892, and the facilities afforded by the railway, there was little or no real distress. Relief works—chiefly small tanks, repairs to wells and earthwork for the railway—were started in September 1891 and closed in August 1892, and during this period more than 1,151,000 units found employment, while 404,088 units were relieved gratuitously. Grass was very scarce and, at the beginning of 1892, was selling at thirty-five seers for the rupee, and about half the cattle are said to have died, though of these not more than ten per cent. were really valuable. The number of emigrants was estimated at about three times that of ordinary years, but the majority had returned before the end of 1892. Prices rose to between eight and nine seers per rupee for wheat, *bājra* and *moth*, but the general average was about ten. The total expenditure on direct relief, including more than two lakhs of land revenue remitted, was rather more than 3·3 lakhs, and advances to agriculturists and suspensions of land revenue amounted to a further sum of Rs. 53,000; there was also much private charity.

Famine of 1896-97.

The year 1896 witnessed an extensive failure of the *kharīf*, affecting more than three-fourths of the State. The relief works consisted chiefly of the Ghaggar canals and the railway, and gave employment to nearly 2,750,000 units while about 814,000 units were relieved gratuitously; the expenditure exceeded 3½ lakhs, and suspensions of land revenue and *takāvi* advances were granted. The prices of grain averaged from seven to nine seers per rupee, but grass was very scarce, and it was estimated that one-third of the cattle in the affected tracts in the south-west and east perished, and about one-fifth elsewhere.

Famine of 1899-1900.

The last great famine was that of 1899-1900; the average rainfall for the whole State in 1899 was 3½ inches—the actual fall at the capital was 1·14 inches—and the harvest naturally failed, but,

owing to the liberal expenditure of the Darbār and the well-devised measures of relief, personally superintended by the Mahārājā, the people suffered less than might have been expected. Relief works and famine camps were started in August 1899 and maintained till October 1900; the works were devised in such a way as to not only provide effective relief but to eventually bring in some profit to the State, and all but one were managed on the same system, the labourers being ganged and given fixed tasks, and payments being made daily in grain at the rate of 14 chittaks for a man, 13 for a woman and 8½ for a child. Non-working children received six, and infants 3½ chittaks. Of the 9,348,715 units relieved on works, more than eighty per cent. were actual workers, and the largest number relieved on any one day was 40,501 on the 14th July 1900. Four poor-houses were maintained, two close to the capital and one each at Churu and Rājgarh; the two former were under State control, and the two latter were managed by local bankers. The daily rations issued in these institutions were 9½ chittaks to a man, 8½ to a woman, and an average of about 5 to a child. There was no system of gratuitous relief to people at their own houses, but distressed *pardā-nashīn* women were fed at the different camps and accommodated in huts specially erected for them close by. Altogether 1,840,300 units were relieved gratuitously at a cost of Rs. 73,720, or at the rate of 7·7 pies per daily unit.

About twenty-two per cent of the population emigrated, and three-fourths of the cattle are said to have died, but the mortality amongst human beings was, according to the official report, not greater than it would have been had the administration been on the lines of a British District. Thanks to the railway, the price of grain was never quite as high as eight seers for the rupee. The total expenditure on direct relief was rather more than 8·5 lakhs, of which nearly half was subscribed by the leading Seths or bankers who have a great reputation for their benevolence; land revenue suspensions amounted to 4·7 lakhs, and Rs. 85,300 were advanced to agriculturists. Mention may here be made of the excellent service rendered by the Imperial Service camel corps, which the Mahārājā converted for the time into a kind of famine department. The experiment was more than justified by its success, and the officers and men readily responded to the calls made upon them.

Protective measures.

By the construction of the railway, the Ghaggar canals and several irrigation works, and by encouraging the people to store the surplus grass and fodder, a good deal has been done to protect the State against the extreme effects of drought. The Sutlej canal will, if carried out, enormously benefit the northern *tahsīls*, and the proposed new railway line will open up the eastern and south-eastern tracts, but in the greater part of the territory the grain and grass crops depend on the rainfall, and, when the monsoon fails, emigration must continue to be the only remedy.

CHAPTER V.

ADMINISTRATIVE.

For administrative purposes the State is divided into the four districts or *nizāmats* of Bīkaner, Reni, Sūjāngarh and Sūratgarh, each of which is under an officer who is styled *Nāzim*. The districts are again subdivided into eleven *tahsīls* under *tahsīldārs* and eight *sub-tahsīls* under *naib-tahsīldārs*. Thus the *sadr* or headquarter *nizāmat* consists of the *tahsīls* of Bīkaner and Lūnkaransar and the *sub-tahsīls* of Sūrpura and Magrā; the Reni *nizāmat* comprises the *tahsīls* of Bhādra, Churu, Nohar and Rājgarh and the *sub-tahsīl* of Reni; the Sūjāngarh *nizāmat* is made up of the *tahsīls* of Sardārshahr and Sūjāngarh and the *sub-tahsīls* of Bīdāsar,* Dūngargarh and Ratangarh; and the Sūratgarh *nizāmat* has three *tahsīls*—Hanumāngarh, Mirzawāla and Sūratgarh—and two *sub-tahsīls*, namely, Anūpgarh and Tibi. Some of the *tahsīldārs*, such as those of Bīkaner, Hanumāngarh, Rājgarh, Sūratgarh, etc., are assisted by *naib-tahsīldārs*. The monthly pay of the above officials varies according to their position on the graded list; thus the *Nāzims* receive from Rs. 125 to Rs 175, the *tahsīldārs* from Rs. 65 to Rs. 100, and the *naib-tahsīldārs* from Rs. 30 to Rs. 50. ADMINISTRATION.

The State has since December 1898 been governed by the Mahārājā. At first he was assisted by a *Dīwān* and Council, but the post of *Dīwān* was abolished in October 1902, and His Highness has since been his own minister. He is aided in the administration by five Secretaries to each of whom are allotted certain departments, *viz.*, (1) Political and Foreign; (2) Revenue and Financial; (3) Public Works and Railway; (4) Home, comprising Education, Jails, Police and Medical; and (5) Military. All these officials possess certain defined powers, but cases of importance are referred to the Mahārājā. The Council still exists but is a judicial, rather than an administrative, body, being consulted only in really important affairs of State; it now consists of five members—namely the first three of the Secretaries above mentioned, one of the principal nobles of Bīkaner (Thākur Jeorāj Singh of Reri), and the Mahārājā's Private Secretary—with His Highness as President. Lastly, each department has its own responsible head, such as the Manager of the Railway, the State Engineer, the Superintendent General of Police, the Revenue Officer, the Customs Officer, etc. Form of government.

During the latter part of Mahārājā Sardār Singh's rule (1851—72), the administration of justice was carried on "in a very loose and unsatisfactory manner." The chief permitted all sorts of CIVIL AND CRIMINAL JUSTICE. History.

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* The Bīdāsar *sub-tahsīl* was established in 1905-06, but the arrangement is a temporary one.

persons to interfere in both civil and criminal cases, and a few words sent through a *golā* (or slave) were sufficient to subvert the decision of the minister in any case or under any circumstances. It was customary to pardon murder and every other crime on payment of a fine, and it was quite unusual to pass a definite sentence of imprisonment. No regular courts existed, and every person arrested was, whether guilty or not, severely fined before he was released. Towards the end of 1871, three courts (civil, criminal and revenue) were established at the capital, but they were not supported by the Mahārājā who continued to permit his favourites to interfere. Even after Sardār Singh's demise, no improvement was noticeable, and until 1878 the returns of the criminal court showed "a determination to make a profit out of crime rather than an honest desire to inflict a really deterrent punishment." In 1884-85, the central civil and criminal courts were abolished and replaced by *nizāmat* courts at Bīkaner, Reni, Sūjāngarh and Sūratgarh; appeals against their decisions lay to the Council, and a further appeal was allowed to the *Ijlās khās* or court of the Mahārājā. About this time, also, the *tahsīldārs* were given certain judicial powers, civil and criminal. On Mahārājā Dūngar Singh's death in 1887, the Regency Council became the court of final appeal, taking the place of the old *Ijlās khās*, and an Appellate Court, presided over by two judges, was constituted. Subsequently, the *naib-tahsīldārs* received powers, certain persons were appointed honorary magistrates for Bīkaner city, Churu and Nohar in 1894-95, and a Munsif's court was established at the capital in 1902-03.

Existing courts.

At the present time, the lowest courts are those of the eight *naib-tahsīldārs*, who are third class magistrates and can try civil suits not exceeding Rs. 300 in value; next come the eleven *tahsīldārs*, who are second class magistrates and decide suits up to Rs. 500. The four *Nāzims*, besides hearing appeals against the decisions in civil or criminal cases of the above courts, possess first class magisterial powers and deal with suits not exceeding Rs. 10,000 in value. The Appellate Court disposes of all appeals against the orders or findings of the *Nāzims*, tries civil suits beyond their powers and, on the criminal side, can pass a sentence of ten years' imprisonment. The Council is the highest court of appeal, and has certain powers of revision; it deals with all murder cases, submitting them with its opinion to the Mahārājā, who alone can pass death sentences. In addition to these tribunals, there are courts of honorary magistrates at the capital and the town of Nohar; both decide petty civil suits relating to immovable property, but the Bīkaner court alone has magisteral powers (of the second class). Lastly, there is the Munsif's court—also at the capital—which tries suits not exceeding Rs. 500 in value.

Legislative enactments.

In the administration of justice, the above courts are guided generally by the enactments of British India; for example, the Indian Penal and Criminal Procedure Codes were introduced with a few additions in 1897, and the Indian Whipping Act is in force. Among

also local laws may be mentioned the Civil Procedure Code of 1884 (recently revised); the Small Cause Court Act; the Gambling Act of 1889; the Registration Act of 1893; the Limitation Act of 1893; the Stamp and Court-fees Act of 1900, etc.

The work of the courts is not heavy. During the last four years, the average annual number of original civil suits decided has been 1,989, of appeals 540, and of applications for execution of decree disposed of 1,465; the bulk of the civil suits related to petty monetary transactions and were dealt with by the *tahsīldārs* and *naib-tahsīldārs* and the honorary magistrates at the capital. On the criminal side, the yearly average number of cases decided has been about 1,400, and of appeals 209; of the latter, nearly one-third were wholly or partially successful.

Registration.

The Registration Act came into force on the 1st May 1893, and the documents registered relate to mortgages, sales, wills, money transactions, etc. The average annual number registered during the last four years was 665, and the value of the property involved was about 5¼ lakhs; the net revenue derived from registration fees is approximately Rs. 2,200 per annum. There are twenty-three offices in the State, namely one under the Registrar and the rest under the various *Nāzims, tahsīldārs, naib-tahsīldārs* (excluding the one at Tibi), and the Munsif of Bīkaner, all of whom are sub-registrars. Documents relating to the sale of land or to adoption are not presented for registration like those mentioned above, but are signed and sealed in he *Mahakma khās* (or chief executive department), after the Mahārājā's sanction has been obtained; the number dealt with yearly is about 520, and the fees charged bring in from Rs. 60,000 to Rs. 70,000 (in 1905-06 as much as Rs. 1,01,115).

FINANCE. In former times.

Colonel Tod tells us that the *khālsa* or fiscal revenue of this State about a century ago seldom exceeded five lakhs of rupees but was sometimes as much as 6½ lakhs; it appears to have been derived chiefly from taxes known as *āngāh, dhuān, pasaiti* and *malba*, and from customs-duties and other imposts. *Āngāh* "embraced quadrupeds as well as bipeds," and was "graduated according to age and sex in the human species, and according to utility in the brute." Each adult male was assessed at four annas (one *āngāh*), and "cows, oxen and buffaloes were placed upon a level with the lord of the creation;" ten goats or sheep were estimated as one *āngāh*, while the camel was equivalent to four *āngāhs*, or one rupee, which Mahārājā Gaj Singh is said to have doubled. This tax was by far the most certain in a country more pastoral than agricultural, and yielded two lakhs annually. *Dhuān* (literally "smoke") was a hearth-tax of one rupee per house or family, peculiar to this State and Jaisalmer; it was sometimes evaded by the powerful nobles, but usually brought in about a lakh a year. *Pasaiti* was a tax of five rupees on every plough used in agriculture, and is said to have been introduced by Rājā Rai Singh in commutation of the corn-tax, or levy in kind, which had long been fixed at one-fourth of the gross produce; it formerly yielded a couple of lakhs but, with decreasing agriculture, had fallen in Tod's

time to about half of this sum. *Malba* was the name of the tax which the Jāt communities imposed upon themselves when they submitted to the sway in perpetuity of Bīka and his successors; the rate was Rs. 2 for every hundred *bīghas* cultivated, and the yearly collections averaged barely half a lakh. Customs-duties and other imposts, such as *dind* and *khushāli*, contributed from 1½ to 1¾ lakhs to the State treasury.

Nothing is known of the finances for the next fifty years or so, but in 1870 it was reported that, in fair seasons and without extraordinary pressure, the annual fiscal revenue was 6½ lakhs, namely 2¼ from lands held under grant, two from customs-duties, 1¼ from *khālsa* villages, and one lakh from miscellaneous sources. In 1872-73 the gross receipts, including a loan of about two lakhs, were shown as 10·4 lakhs, towards which land revenue contributed four, and customs-duties nearly two lakhs, and *nazarāna* on account of the succession of Mahārājā Dūngar Singh Rs. 47,600. The expenditure was within a thousand rupees of the income, but included a couple of extraordinary items, *viz.*, Rs. 1,25,000 in repayment of debt and Rs. 1,16,000 in connection with Mahārājā Sardār Singh's funeral ceremonies. The following are some of the taxes mentioned as having been levied about this time:—*Afīm-kā-saudā* and *menh-kā-saudā*, collected from those who gambled about the price of opium or the amount of rainfall and varying from Rs. 2 to Rs. 6 per speculator; *chaudhar-bāb* or a cess of Rs. 11 from each village *chaudhri* or headman; *chauth zamīn* or one-fourth share of the sale proceeds of all lands or buildings within the limits of the city; *dhuān* or house-tax, sometimes as much as Rs. 2-8; *khola* or fee on adoption of a son, varying with the means of the adopter and supposed to be limited to Rs. 1,000, but often exceeded in Sardār Singh's time; *kīraut lāgān-kī-bāchh* or license-fee paid by craftsmen such as blacksmiths, goldsmiths, tailors, etc.—generally a lump sum fixed yearly and collected by the *chaudhris* of each trade from individuals; *kandi-kā-lāga* or license-fee for the manufacture of sweetmeats for festivals; *kaprā-kī-dalāli* or brokerage from cloth merchants; *kot* and *khāi bāchh*, occasionally levied from the Thākurs as a contribution towards the repairs of the Bīkaner fort; *rāhdāri* or toll paid at the gates of the city on timber, fuel, quicklime, vegetables, grass, fodder, etc., brought in and varying from nine pies to Rs. 2 per cart or camel load; *rūpota* or tax on shops and on camels and certain goods sold in the city; *sīnghoti* or tax on sheep and goats at the rate of one rupee for every fourteen; *rakhwāli* or protection fee of Rs. 2 per house; and *talibāb* or cess levied from non-agriculturists at Rs. 2 per family and Rs. 4 per camel.

On Mahārājā Dūngar Singh's accession (1872), the State was considerably involved in debt, but all claims had been satisfied by 1885, and when he died two years later there was a cash balance of nearly nineteen lakhs in the treasury. During the minority of the present chief (1887—98), the ordinary annual revenue rose from sixteen to more than twenty-one lakhs, and for the five years ending the 31st March 1899 (including one of famine) averaged twenty lakhs,

towards which land revenue contributed 7·4, and customs 6·6 lakhs. Further, although large sums were spent on the construction of the railway and Ghaggar canals, the raising of the camel corps, the revenue settlement and other objects, the credit balance, when the time came to hand over the reins of government to His Highness, exceeded thirty lakhs. In 1899-1900, in consequence of the famine, the ordinary receipts were only 15·6 lakhs but the average for the succeeding five years was 24·3 lakhs.

Present normal revenue and expenditure.

At the present time, the normal revenue of the State may be said to be about thirty-two* lakhs a year, and the expenditure approximately eight lakhs less. The chief sources of revenue are (in lakhs):—railway, including telegraph, 10; customs 7·3; land, including irrigation, 6·5; tribute from *jāgīrdārs* 3·5; judicial, including court-fees, stamps, etc., 1·5; and minerals, including Rs. 6,000 paid by Government under the salt agreement of 1879, 1·4. The minor sources consist of:—registration Rs. 70,000; sale of State lands and houses Rs. 60,000; excise Rs. 28,000; and jails and press Rs. 18,000. The main items of expenditure in an ordinary year are (in lakhs):—railway 4·5; Public Works, including the mechanical department, 4; army 3·5; privy purse and household 3·5; administrative staff, civil and judicial, 3; and police 1·3. Less important items comprise the Medical department, including municipalities and sanitation, Rs. 80,000; religious and charitable endowments Rs. 55,000; customs Rs. 55,000; cost of the Political Agency Rs. 45,000; education Rs. 35,000; and jails Rs. 30,000.

Financial position

The financial position of the State is eminently sound, there being no debts of any kind. Owing to the famine of 1899-1900, which caused a considerable falling of in the revenue and necessitated a large increase in the expenditure, to the extension of the railway, and to the carrying out of many works of public utility, the credit balance is not what it was nine years ago, but it actually amounted to 5·95 lakhs on the 30th September 1907, and in addition there are such valuable assets as (i) the Darbār's section of the Jodhpur-Bīkaner railway, the capital outlay on which amounted at the end of 1907 to more than fifty-five lakhs; (ii) the Palāna colliery; and (iii) the Ghaggar canals.

Coinage.

The State had formerly a silver and copper coinage of its own, the privilege of coining having been granted by one of the Delhi kings (Alamgīr II or Shāh Alam II) about the middle of the eighteenth century; the mint was always located at the capital. All the coins bore the name of Shāh Alam till 1859 when that of Her late Majesty was substituted, and, as each chief had a special symbol of his own, the various issues can easily be recognised. The marks were the following:—of Gaj Singh a *patāka* or flag; of Sūrat Singh a *trisūl* or trident; of Ratan Singh a *kirnia* or turban-star; of Sardār Singh a *chhāta* or umbrella; of Dūngar Singh a *chaorī* or fly-whisk; and of

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* This is perhaps under the mark, even in a normal year. During the last two years the ordinary receipts exceeded thirty-four lakhs.

A.A.A.

Ganga Singh a *morchhal* or peacock feather fly-whisk. The silver coins were well struck and were among the best in Rājputāna, but the copper ones were, up to the time of Sardār Singh, indifferently turned out and often varied a good deal in weight. The first three of the chiefs above mentioned minted no silver coin smaller than a rupee, but Mahārājās Sardār Singh and Dūngar Singh issued eight-anna, four-anna and two-anna pieces. The local and British rupees appear to have been of much the same value, as 100 of the former are said to have usually exchanged for from 101 to 105 of the latter. Act IX of 1876 empowered the Governor General in Council to declare coins of Native States of the same fineness and weight as the Government coins to be, subject to certain conditions, a legal tender in British India, and authorised Native States to send their metal to the mints of the Government of India for coinage. The only States throughout India which availed themselves of the opportunity afforded by this Act were Alwar and Bīkaner. The latter applied for the substitution of silver and copper coins struck in a British mint for its then existing currency in September 1890, and the proposal being accepted, an agreement was drawn up and the necessary dies were prepared. The Darbār proceeded to call in its silver coins and despatch them to the Bombay mint, whence they were re-issued as rupees which became legal tender in British India; similarly the copper pieces were sent to Calcutta where they were reminted. The number of rupees recoined for the State has been 707,072,* namely 102,030 in 1892-93, 493,836 in 1893-94 and 111,206 in 1897-98; while that of copper coins has exceeded $6\frac{1}{2}$ millions, all of which were struck in 1894-95. The currency bears on one side the effigy of Her late Majesty and the words "Victoria Empress" in English; and on the other side the value and "Bīkaner State" in English, the date in Persian, the words "Mahārājā Ganga Singh Bahādur" in both Persian and Hindī, and a couple of *morchhals*. Under the agreement, which is dated 16th February 1893, the Darbār, among other things, abstains from coining silver and copper in its own mint for a period of thirty years.

LAND REVENUE. Tenures.

The land may be divided into two main groups, namely (i) that held by grantees, whether individuals or religious institutions, and (ii) that under the direct management of the Darbār and called *khālsa*. Of the 2,110 towns and villages in Bīkaner, 792 are said to be *khālsa* at the present time, and they occupy an area of approximately 7,372 square miles or about thirty-two per cent. of the total area of the territory. Some of the estates held by grantees are revenue-free (*be-talab*), while for the rest a fixed sum is paid yearly or certain services are performed. In the *khālsa* villages (save those of the Tibi *sub-tahsīl*, where the tenure is *zamīndāri*), the proprietary right in the land belongs to the Darbār, and the cultivator's right of

* This figure and those which follow it have been taken from the official publication entitled *Financial and Commercial Statistics of British India* (twelfth issue) but, according to the Darbār, 1,110,605 rupees were recoined for it at Bombay in 1892 and 1897.

occupancy may be said to depend on his ability to meet the demand for revenue.

Revenue-free estates.

Villages or portions thereof are held revenue-free either by Rānīs, or near relations of the chief (Rājwīs), or connections by marriage (Parsangīs), or by those Thākurs whose estates have been attached or confiscated, but to whom lands have been given for maintenance, or by others as a reward for services rendered. Such grants are temporary and can be resumed at the pleasure of the Darbār; the holders pay a cess called *neota* on the accession of each Mahārājā, which has been fixed at one-fifteenth of their estimated annual income, as well as certain sums on such special occasions as the Mahārājā's marriage or the birth of an heir to the *gaddi*. Next come the *sāsan* villages or lands granted to temples for their upkeep or in charity to Brāhmans and Chārans; they are held free and practically in perpetuity. Lastly, there are the *bhūmiās* who are all Rājputs and possess a good deal of land; they pay no revenue, though some of them are subject to certain taxes, and in return they guard their villages, follow up the tracks of criminals, escort treasure, etc.

Pattā estates

The *jāgīrdārs*, or *pattādārs* as they are usually called here, are for the most part the nobles of the State, and may be grouped into two classes, *tāzīmi* and *non-tāzīmi*. The former are distinguished among themselves by their respective positions in *darbār* and the degree of recognition which they are entitled to receive from the Mahārājā. At the present time 123 enjoy the *tāzīm*, and among them are four who are held superior to the rest and are styled *Sarāyats*. A list of the principal nobles, with some details regarding their title, clan, annual income, etc., will be found in Table No. LXIII in Vol. III-B.

The *pattādārs* formerly served the Darbār with troops, namely horsemen in the case of the larger estates and camel *sowārs* or foot-soldiers in that of the smaller holdings, but Mahārājā Ratan Singh commuted this service to a cash payment (*rekh*) at the rate of Rs. 60 per horseman. This sum was subsequently raised to Rs. 125, and increased from time to time by the addition of certain taxes until at last (in 1869) most of the principal Thākurs combined to resist the extortions of the Darbār; it was eventually arranged that they should pay at the rate of Rs. 200 per horseman for a term of ten years, when the matter would be reconsidered. This period having expired, a committee was appointed to fix fresh rates, and a proposal to make them still higher led to an open rebellion on the part of several of the influential nobles which necessitated the intervention of the British Government. According to the final settlement arrived at in May 1884, the sum payable by each Thākur was permanently fixed; various cesses were abolished, and only those which were tokens of homage due to a feudal superior and were common in all Rājput States were retained; the latter were all specified by name in the *sanad* granted to each man, and it was further provided in that document that no other cess would be levied.

The *pattādārs* thus pay a fixed military tribute called *rakm* and made up of *rekh* proper (*i.e.*, a money payment in lieu of service) and *rakhwāli* or protection fee which was levied at a time when their estates required support against the inroads of Sikhs and others; this yearly *rakm* varies in amount in the different holdings but is generally about one-third of the income. They have also to pay a year's revenue as *nazarāna* or *hukmnāma* (fee on succession), as well as the *neota* cess (which, in their case, has been fixed at one-fifth of their annual income), and certain sums on the Mahārājā's marriage, etc. They are further required (i) to keep their estates in a flourishing condition (*ābād*) and their cultivators contented and happy by collecting the revenue at reasonable rates; (ii) to serve their chief only; and (iii) to abstain from harbouring or taking part with any of his enemies. In return, they receive presents from the Darbār on the occasion of marriages and funerals in their families, and their estates descend from father to son (or, with the permission of the Mahārājā, to an adopted son), though they are of course liable to resumption for serious offences against the State.

Cultivating tenures in *khālsa* and *pattā* villages.

In considering the nature of the tenure on which the present cultivator in *pattā* and *khālsa* areas hold his land, it is necessary to draw a distinction between villages which were in existence before the Rāthor invasion and those which have been subsequently founded. When Rao Bīka came here in the latter half of the fifteenth century, a considerable portion of the country was occupied by various Jāt tribes who appear to have been organised into communities forming what may be called joint or landlord villages, in which the original settlers or their descendants claimed the right to the exclusive possession of all the land round the village site within certain more or less definitely recognised boundaries. Most of these villages are now included in the *pattā* estates, and the old hereditary joint landlord claim has generally passed to the Thākur who, while respecting the rights of the first clearer of land and his heirs, maintains a hold on the occupied waste. The pre-Rāthor villages which have been continuously *khālsa* have, on the other hand, preserved their original constitution better, and still keep up the tradition and show traces of joint organisation, but they are very few in number and are confined to the central portion of the State and the neighbourhood of the capital.

In the *khālsa* villages founded since the Rāthor conquest, there never existed (prior to 1886) any body of persons who asserted or exercised any claim as joint landlords of the whole village area; the villages consisted of groups of independent cultivators, the right of each of whom, based on his being either the first clearer of land or the descendant of such a clearer, was limited to the actual area held by him; he had no responsibility, and consequently no contingent right, in regard to the holding of any other cultivator, nor had he any claim over any undivided portion of the unoccupied waste except a customary right to graze his cattle there. The *chaudhris* or headmen (usually the leaders of those who had originally founded the village or their descendants) occupied, as servants of the Rāj, a position superior to

that of the other cultivators, but possessed no landlord claim over them nor any right in the soil outside their own separate holdings. Their duties were to settle cultivators (*asāmis*), get the waste brought under crop, and realise the customary dues on behalf of the Darbār and not as their own rents; and, for these services, they were allowed to hold a certain area of land free, and to collect from the other cultivators and keep for their own use marriage and weighment fees; in the eastern *tahsīls* they also received a fixed sum called *nānkār* (subsistence) and a commission of five per cent. (*pachotrā*) on the revenue collections of the village. The above description of the cultivating tenures applies generally to the *pattā* villages at the present day except that the Thākur is far more closely connected with the management and control of the land than the ruler of the State in his *khālsa* domain, and his claim to the soil is more definite. Where the Thākur has been fairly strong, the *chaudhris* have in consequence had far less power and authority than those in *khālsa* villages, and have been little more than his dependents.

Methods of assessment.

Prior to 1884, there was no uniform system of assessment and revenue collection. The commonest method was to measure, every second or third year, the land held by each individual and assess it at a cash-rate per *bīgha*; the sum so calculated was paid by the cultivator with the addition of certain cesses (*lāg*), fixed without any reference to the area held. Under this system, there was no assessment fixed for each village in the lump, and the State lost or benefited by any yearly decrease or increase in the area held and cultivated, as caused by the departure of old agriculturists or the settling of new ones. Occasionally, a share of the produce, either by actual division (*batai*) or by appraisement (*kankūt*), was taken instead of, and sometimes in addition to, a cash-rate. In other cases, chiefly in the eastern *tahsīls*, a lump assessment (*ijāra*) would be annually fixed for a village and distributed over the entire cultivated area, excluding the fields of the *chaudhris* and some of the village menials. In the central sandy tract, the revenue was collected by a system known as *āngāh bāchh*, which had little or no direct connection with the area held or cultivated and was a combination of rates on ploughs and cattle with a poll-tax and some additional items. The demand was assessed by houses, each of which paid the following taxes yearly:—(i) *halgat* or Rs. 3 per bullock plough and Rs. 5 per camel plough; (ii) *āngāh* or R. 1-4 per cow, R. 1-8 per buffalo, R. 1-12 per bullock, and Rs. 3-8 per camel; (iii) *dhuān* or house-tax of Rs. 2-8; (iv) *rakhwāli* or protection fee of Rs. 2; and (v) *pagrī* or poll-tax of R. 1-4 per adult male. The rates of course varied considerably, and a particular class, styled *hāli*, handed over to the Darbār one-fifth of the produce of their fields instead of paying *halgat*. In a few villages, the demand was assessed from house to house, not by any definite rate but at lump sums varying with the poverty or wealth of the inmates; this was called *bhent-kā-bāchh* and is still common in the *pattā* estates. But, whatever the

method of assessment employed, there was little hesitation at any time in levying new and irregular cesses.

In 1884 it was decided to undertake a summary settlement of the *khālsa* villages with a view to obtain some idea of the amount of revenue which such villages could be called upon to pay, and to assess and collect that amount on some uniform system in place of the haphazard methods described above. The settlement was completed in 1886 and introduced for a period of five years, subsequently extended to eight; it applied to all the *khālsā* villages except (*a*) those in the Anūpgarh *sub-tahsīl*, which was at that time held in *pattā* but, on reverting to the fisc in 1888, was settled in 1890; (*b*) those in the Tibi *sub-tahsīl*, in which a settlement already existed; and (*c*) those in the *nāli* area (*i.e.*, in the vicinity of the bed of the Ghaggar), which was under the direct control and management of the Rāj by its local officials. A change was made in the principle of assessment. Formerly the *chaudhri* was, as a general rule, in the position of an official collector of the revenue due from the various holdings; he was responsible for the amounts payable by individual resident cultivators but not for a sum fixed in lump for the village, nor was he called on to make good any deficiency arising from a diminution in the area cultivated owing to adverse seasons or emigration. At the summary settlement, each village was assessed at a lump sum, for the payment of which the *chaudhris* became responsible jointly, the responsibility of each being measured by his share in the *chaudhar* of the village; the status of the *chaudhri* was in short changed from that of an official rent-collector to that of a farmer of the revenue.

The sum assessed on each village was calculated by applying to the cultivated and waste areas rates which were considered to be suitable, and these rates did not generally vary from village to village but were uniform throughout a circle or subdivision of a *tahsīl* made for assessment purposes. The status of farmer conferred on the *chaudhri* did not, however, empower him to collect such sums as he thought proper, nor were the cultivators placed in the position of being his tenants, nor was he at liberty to eject them so long as they paid the proper rent; he was only allowed to collect at the rates used for fixing the lump assessment of the village and to appropriate any miscellaneous profits from waste or from increased cultivation which might remain after the lump assessment had been paid. In the Sūratgarh *nizāmat*, the *chaudhris* seem, as a general rule, to have kept the farm in their own hands, but in the eastern *tahsīls* the majority of the cultivators became joint in the profits and losses. On the whole, the summary settlement had no very marked effect in turning the development of the tenures into any new channel.

Settlement of 1894-95.

The first regular settlement was made by a British Officer from the Punjab (Mr. P. J. Fagan, I.C.S.) in 1892-93, and came into force in 1894-95 for a period of ten years which has since been extended by three years. The principal change made was to class almost all the villages in the Sūratgarh *nizāmat* (except in Tibi) as *ryotwār*

or *khātawār*, each cultivator holding land on his own account and being personally responsible for payment of the assessment imposed on it, so long as he resided in the village and whether the entire area were cultivated in a particular year or not. If a *khātadār* left the village, the land was to continue to be entered in his name for three years but could, in the meantime, be made over for cultivation to any person willing to take it and pay the revenue due thereon. Should the original occupant return within the three years, he could resume possession on payment of any unrealised arrears and such compensation for disturbance to the intermediate holder (*sipurd-dār*) as might be deemed just; but, if he failed to return and claim his land by the end of the third year, his name was to be struck off the *khataonī* and his right would then be held to have lapsed. The provision that no resident cultivator could surrender his holding during the term of the settlement or even exchange it for a piece of land of equal area from the waste was found to be in practice rather a harsh one because the soil, after producing crops regularly for about four years, became much impoverished; it was accordingly decided in 1905-06 to allow such exchanges after every four years.

In the remaining villages, (still excluding Tibi), the tenure was made joint, *i.e.* there was a fixed lump assessment, for the payment of which the joint village body was, as against the State, jointly and severally responsible, while, among themselves, each member was responsible for the amount entered opposite his name in the settlement record. Here again a modification has been found necessary because, in consequence of successive bad years, some of the villagers have migrated to other territories and a few have become too poor to cultivate their lands, with the result that the burden of paying the whole of the fixed demand has fallen on the remaining members of the village body. To remedy this, it has recently been ruled that any man is at liberty to become individually responsible only for the amount entered against his name on precisely the same conditions as in the *khātawār* villages, while those who prefer the system of joint responsibility are to be left as they are.

Another change introduced at this settlement related to the unoccupied waste which, in the *khātawār* villages, was declared to belong to the Darbār but usable by the cultivators for grazing purposes on payment of a fee called *bhunga*, whereas in the other villages the whole cultivating body was given a joint landlord claim to it, and any cultivator could, with the consent of his colleagues, break up land therein. Lastly, the *chaudhris* of both classes of villages reverted to their position of official collectors of revenue, but under closer supervision than before; they received a commission of five per cent. on their collections as well as the customary dues from the villagers, and were permitted to hold a certain area of land free. The average assessment per acre on wet land is about Rs. 2-11, and that on dry land varies from 2½ to 8¼ annas.

In the Tibi *sub-tahsīl*, which once formed part of the Hissār District, the tenure is *zamīndāri*, and a twenty years' settlement was The Tibi villages.

made in 1856 by the British Government. Five years later, the tract was granted to Mahārājā Sardār Singh for services rendered during the Mutiny, and for seven years the Darbār disregarded the settlement, but, on the villagers complaining to Government, the Mahārājā was required to abstain from interference with their rights, and in 1869 he signified his intention to continue the settlement for seven years beyond the date on which it would have ordinarily expired. A new settlement was accordingly made in 1883 and continued in force till 1906, when a fresh one was introduced for a period of twenty years. The present assessment is Rs. 22,000 a year as compared with Rs. 23,784 under the earlier settlement, exclusive of local rates and cesses.

MISCELLANEOUS REVENUE. The miscellaneous revenue is derived from salt, opium, *liquor*, hemp drugs and stamps, and amounts to rather more than *a lakh of* rupees a year.

Salt. The salt consumed in Bikaner is of two kinds, namely (i) that produced at Lūnkaransar, which is inferior and is eaten only by the poor or used for curing skins, etc; and (ii) that manufactured at sources under British management, such as Dīdwāna, Pachbhadra and Sāmbhar. The total out-turn at Lūnkaransar is restricted to 30,000 maunds in any one year, and is usually about 18,000 maunds. The quantity imported from outside is considerable, and includes 20,000 maunds supplied by the Government of India for the use of the people at a cost not exceeding eight annas per maund *plus* half the full rate of duty. The average annual consumption per head is said to have risen from four lbs. in 1891 to nearly six in 1901 and about seven at the present time. The yearly revenue from salt is approximately Rs. 40,000, of which Rs. 6,000 are received from Government as compensation under the agreement of 1879; the balance represents the sale proceeds of the half-duty salt and the amount of the tax on the locally manufactured variety.

Opium. The poppy is not grown in the State, though its cultivation was attempted as an experiment in a few villages in the east in 1905-06, and practically all the opium consumed here comes from Kotah or Mālwā; its subsequent export into British territory is prohibited by an agreement concluded with the Government of India in 1879. The import duty on the drug is at present Rs. 205 per maund, but the amount realised under this head is included in the customs receipts, and the opium revenue proper is only about Rs. 500 a year, being the fees paid by licensed vendors at the rate of R. 1 (retail) and Rs. 2 (wholesale) per shop.

Liquor. The country liquor is of the usual kind, being prepared by distillation from the flowers of the *mahuā* tree, molasses and other forms of unrefined sugar; several qualities are brewed, and prices range between eight annas and R. 1 per bottle containing about two pints. The right of manufacturing and selling this liquor is farmed out to a contractor for a term of years, and the operations are under the control of the Revenue department. In 1906-07 there were fourteen liquor shops, and the license-fees for preparation and vend

yielded Rs. 21,952 as compared with Rs. 22,373 in the previous year. Foreign spirits are consumed only by some of the richer Rājputs, and to no great extent.

Hemp drugs.

The hemp drugs comprise *bhang*, *gānja* and *charas*, and the right of manufacturing and selling them is sold to a contractor. The annual revenue derived from fees is about Rs. 5,000, and seventeen shops are maintained. As in the case of opium, the export into British territory of spirits or intoxicating drugs is prohibited by the agreement of 1879.

Stamps.

Receipts from the sale of stamps appear to have increased steadily; the annual average for the five years ending 31st March 1899 was Rs. 21,800, and for the succeeding five years nearly Rs. 35,200, while the actual figures for 1905-06 and 1906-07 were Rs. 59,065 and Rs. 52,351 respectively. Court-fees, it should be mentioned, are collected in cash, and the stamps in use, whether for judicial or non-judicial purposes, are of the same pattern, except that those affixed to *hūndīs* or bills of exchange are of a special type introduced in May 1900.

MUNICIPAL.

No municipalities in the true sense of the term are to be found in the State, but small committees or boards exist at the capital and ten places in the districts. The gross annual income, derived from a conservancy cess, varies between Rs. 18,000 and Rs. 22,000, while the expenditure is usually about Rs. 35,000 or Rs. 37,000; the difference between the receipts and the disbursements is found by the Darbār. The duties of the various committies relate to conservancy and lighting, the prevention of encroachments on public thoroughfares, the settlement of petty disputes relating to easements, the provision and control of slaughter-houses and markets, the sale of land belonging to the State, etc.; the heaviest items of expenditure are the pay of the sanitary staff including the sweepers, and the cost of the iron carts and buffaloes.

The municipal committee at the capital is the most important, and dates from 1889, prior to which such sanitary arrangements as existed were supervised by either the *Kotwāl* or one of the Hospital Assistants or a special officer. Ten or twelve years ago, the city swarmed with ownerless dogs, but this nuisance was for the time removed by confining them in homes built at suitable places (where they were fed) and by segregating the sexes. The local bankers contributed more than Rs. 21,000 for this purpose, and at one time the homes contained several thousand dogs, but, as soon as the above sum had been expended, operations ceased, and the nuisance is probably as great and as dangerous as ever it was. In other respects, a good deal has been done to increase the comfort of the inhabitants and improve the sanitary condition of their surroundings. The committee consists at present of a chairman (one of the State officials), a joint chairman (the Civil Surgeon, who is also Health officer), and twelve members, all of whom are nominated by the Darbār. The staff includes a Sanitary Officer, a *sarishtedār*, a *moharrir*, two *gumāshtas*, a *girdāwar*, four *daffadārs*, twenty

chaprāsis, and about 280 sweepers (male and female), and costs altogether about Rs. 1,400 a month. In 1905-06, the total receipts were Rs. 3,829 and the expenditure Rs. 27,149.

Municipal boards were established at the following places in the years entered against each:—Bhādra (1883); Sardārshahr (1884); Sūratgarh (1888); Nohar and Rājgarh (1890); Churu and Reni (1893); Ratangarh and Sūjāngarh (1895); and Dūngargarh (1896). The local *tahsīldārs* or *naib-tahsīldārs* are *ex-officio* Presidents, and the members include the Hospital Assistant and a few of the leading citizens. The receipts and disbursements in 1905-06 were respectively Rs. 8,288 and Rs. 9,561.

PUBLIC WORKS.

The Public Works department, or *kīlīkhāna* as it was called, used to be included among the fixed establishments (*kārkhānajāt*), but was detached therefrom in September 1885 and placed under a separate officer; its immediate head has been a trained engineer since April 1891 except for a period of about twenty months (1901—03) and four months (1906), when one of the members of Council was in charge. The staff at the present time consists of an Engineer, an Assistant Engineer, seven sub-overseers, and some clerks, draftsmen, etc., and the annual cost of this establishment is about Rs. 27,000. The duties of the department are to keep in repair all State buildings (civil or military), roads and irrigation works, and to construct such new ones as may from time to time be sanctioned by the Darbār. During the ten years ending March 1901, the annual expenditure on works of public utility (excluding the railway, the Ghaggar canals and the colliery) averaged nearly three lakhs, and for the next four years was rather more than two lakhs. The actual outlay in 1906-07 was Rs. 3,15,417, namely original works Rs. 2,14,677; repairs Rs. 69,583; and establishment Rs. 31,157; the cost of establishment was thus 9·8 per cent. of the total expenditure.

The chief original works carried out during the last fifteen years have been the Ganga Niwās or audience hall in the fort, which has cost about 2·8 lakhs; the lines and hospital of the Imperial Service camel corps; the additions to the Central jail; the Bhagwān Dās Hospital, named after a wealthy banker of Churu whose family provided the necessary funds (a lakh of rupees); the Ganga Kacheri or public offices; the Mahārājā's fine new palace, called Lālgarh, which, with its electric light installation, guest-house, offices, etc., has cost upwards of ten lakhs; and the Victoria Memorial club, erected at a cost of about a lakh of rupees subscribed by the leading citizens. The above are all at the capital, and many others could be mentioned. In the districts, the principal works include several hospitals, police stations, schools, and other buildings, besides a couple of irrigation tanks.

The electrical and mechanical department has been under the general supervision of the State Engineer since 1904, but it has its own immediate head. The latter is in charge of the ice factory, the telephonic system, the workshops, the machinery by which drinking water is pumped up from five wells at the capital, and the central

electric station, which was opened by the Viceroy in November 1906 and supplies power for lighting the fort, the Lālgarh palace, the principal hospital, the club, several private houses in the city, and the main thoroughfares. The expenditure of this important department has increased from Rs. 47,217 in 1903-04 to 2½ lakhs in 1906-07.

ARMY.

The State maintains an Imperial Service camel corps, the normal strength of which is 500 of all ranks, and a local force consisting of sixty gunners, 380 cavalry (including the body-guard), and 500 infantry (including the band), or a grand total of 1,440 men. The actual strength in September 1907 was 1,368, and the cost for the year Rs. 3,51,677. There are ninety-four guns of various sizes, but sixty-one of them are reported to be unserviceable.

The Ganga Risāla.

The camel corps was raised between 1889 and 1893 as a contribution to the defence of the Empire, and is called the Ganga Risāla after the present chief; it is composed of sixteen native officers; 89 non-commissioned officers, and 305 men, chiefly Rājputs and Kaimkhānis, and about 114 followers. The annual cost is ordinarily between 1·5 and 1·6 lakhs, but the average for the last three years has been Rs. 1,48,220. The officers are armed with swords and Webley pistols, and the non-commissioned officers and men with Lee-Metford rifles and sword-bayonets; followers proceeding on service are provided with swords. In August 1900 four hundred picked men and fifty followers left for China, where they served as an infantry regiment and returned to Bīkaner in June 1901. Again, in 1903-04 a detachment of about 260 men mounted on camels greatly distinguished itself in Somāliland, and received high praise from the General Officer Commanding the Field Force; one of the *Sūbahdārs* was awarded the Order of Merit of the third class for conspicuous gallantry at Dharatoleh in the same action in which Captain (now Lieutenant Colonel) Walker won his Victoria Cross. The casualties of the detachment in this campaign numbered seven, namely one officer and four men killed in action and two deaths from disease. In addition to its services in the field, the corps was of the greatest assistance to the administration in the famine of 1899-1900; it has also been more than once the best shooting regiment among all the Imperial Service troops.

The State contributes to no local corps contingent, though formerly (1835—42) it paid Rs. 22,000 a year towards the cost of the Shekhāwati Brigade (see page 326 *supra*); nor is there any cantonment in this territory, though the 43rd (Erinpura) Regiment used till recently to furnish a small detachment of cavalry and infantry (thirty-two of all ranks) for escort and guard duty at the residence of the Political Agent.

POLICE.

The total strength of the police force, including clerical and menial establishments, is at present 970, of whom 238 are mounted, chiefly on camels; there is thus one policeman for every twenty-four square miles of country and every 603 inhabitants. The force is distributed over fifty-two *thānas* or police stations and seventeen outposts, and is under a General Superintendent, subordinate to

whom are two Superintendents (one for the city and the other for the districts), an Assistant Superintendent (for the city), four Inspectors, and fifty-two sub-inspectors, etc.; the yearly cost is about Rs. 130,000. The inspectors, sub-inspectors, head constables and *sowārs* are armed with swords and guns, and the ordinary constables with swords and batons.

Statistics relating to the working of the police are only available for the last four years. In 1903-04, cognisable cases numbered 822, and, of 722 persons arrested and sent up for trial, 420 or more than fifty-eight per cent. were convicted. In the following year, the number of cognisable cases fell to 592 and, of persons arrested and sent up for trial, to 515; of the latter, 307 or 59·6 per cent. were convicted. In 1905-06, there were 756 cognisable cases, and, of 801 persons sent up for trial, 408 or 51 per cent. were convicted. The figures for 1906-07 were:—cognisable cases 638; persons sent up for trial 708; persons convicted 400, or 56·5 per cent. of those sent for trial. In the matter of recovering stolen property, the force has been fairly successful, having recovered 34·5 per cent. in *1903-04*, 37·6 in *1904-05*, 50·02 in *1905-06*, and 48·46 in *1906-07*. Serious crime, once very prevalent on the Shekhāwati and Jaisalmer borders, is now comparatively rare, and only twenty-three cases of dacoity have been reported during the last four years; not a single case occurred in 1907.

Criminal tribes.

The tribes classed as criminal in Bīkaner are the Baoris and Mīnās, who numbered 2,455 and 1,139 respectively at the last census; the former are found in 269 villages, chiefly in the south-east and north, and the latter in 58 villages mostly in the east. The number borne on the register is now 1,211 (of whom 1,046 are Baoris), and they hold about 14,900 acres of land; they are controlled and supervised by a small staff under an officer styled *mohtamid*, and are said to be well-behaved.

JAILS.

In former days no regular jails existed. Prisoners of low caste were "sometimes chained up like dogs in the open plain, unprovided with kennels;" others were confined in the *kotwāli* or police lock-up, where they occasionally received a small allowance of food from the State but more frequently existed on public or private charity, and it was not unusual to see gangs of them parading in the streets under police escort and receiving alms from the inhabitants. The better class of prisoners, such as Thākurs and other Rājputs, etc., found a lodging in a place in the fort called Netāsar where, though space was limited and sanitation disregarded, a sufficiency of food, including a little opium, was forthcoming. No labour of any kind was exacted from any convict.

In 1872, an enclosure, known as Dharampura, and originally intended as a home for ownerless cows and goats, was taken over by the Darbār and converted into a kind of prison with accommodation for about seventy-five inmates by erecting a couple of long sheds. Here the prisoners were fairly fed and clad, and were given some employment, while the sick were well cared for, but there was much over-

crowding, and the building had to be enlarged, first in 1879-80 and next continuously between 1887 and 1893, until there was eventually room for 590 persons (557 males and 33 females) at the rate of 648 cubic feet per head. The additions made included barracks, bathing places, cook-houses, covered latrines, factories, solitary cells, store-rooms, a hospital, and all the adjuncts of the modern prison.

The Central Jail.

The above buildings form the present Central jail which has on more than one occasion been described as one of the best managed and healthiest in India; it is situated within the city with the exception of those portions which were constructed last of all and which lie to the east. The accommodation provided in 1893 has been found to be quite sufficient for ordinary purposes, and cases of overcrowding have occurred only on a few days in 1899 and generally throughout 1900, when famine caused more than the usual amount of crime. The institution was placed under the supervision of the Civil Surgeon in 1888, and the prisoners from Netāsar were transferred to it two years later. The annual cost of maintenance, including the pay of the guard, varies from Rs. 20,000 to Rs. 30,000, against which must be set the net profits derived from manufactures (about Rs. 15,000). The principal industries are the weaving of cotton cloth, rugs (*darīs*), tape, and camel and horse girths; woollen shawls (*loīs*), blankets and carpets; silk cloth for summer suits; curtains, etc. The carpets are famous, and are exported even to Europe and America; wool fine enough for 20 to 30-thread carpets is easily procurable in Bīkaner, while the ordinary Indian wools are only suited for 10-thread work. Some further particulars regarding the Central jail will be found in Table No. LXIV in Vol. III-B.

Prisons in the districts.

In the districts, besides the usual lock-ups (*havālāts*) found at the headquarters of each *tahsīldār* or *naib-tahsīldār*, there are two larger prisons, one at Reni and the other at Sūjāngarh, accommodating eighty-six and sixty-six inmates respectively, and intended for persons who are sentenced to one year or less. They are directly under the local *Nāzim*, but are inspected from time to time by the Civil Surgeon. The annual cost of maintenance of either ranges between Rs. 3,000 and Rs. 4,000, towards which the profits from jail industries, such as the weaving of cotton cloth, rugs and tape, contribute about Rs. 400.

EDUCATION. Literacy of population in 1901.

At the last census, 14,884 persons or 2·54 per cent. of the people (namely 4·7 per cent. of the males and 0·16 of the females) were returned as able to read and write. Thus, in regard to the literacy of its population, Bīkaner stood thirteenth among the twenty States and chiefships of Rājputāna. Of the three main religions the Jains were, as elsewhere in the Province, easily first with more than 15 per cent. literate, and were followed at a considerable interval by the Hindus with 2·14, and the Musalmāns with nearly one per cent.

Education prior to 1872.

Prior to 1872, the only places of education appear to have been temples, mosques, Jain monasteries (*upāsāras*) and indigenous schools called *pāthshālas*. At the last, which are still to be found in the larger towns and villages, the sons of well-to-do mer-

chants were taught to read, write and cipher, and the entire school equipment usually consisted of a board and a piece of wood; classes were generally held in the open air on the shady side of a street. The course of instruction extended over about three years, and the fees for this period would be some six maunds of *bājra* and Rs. 8 in cash per pupil; the more wealthy parents gave Rs. 100 or so as a present in addition. At the *upāsāras* Sanskrit was studied, while at some of the mosques the *maulvis* taught the boys of their own religion to recite the Korān.

Subsequent development.

The first State school was apparently opened at the capital in 1872; three teachers gave instruction in Hindī, Persian, Sanskrit and the native system of accounts, and the number on the rolls in January 1873 was 275. An Urdu teacher was added in 1882, and in the following year a second school (also at the capital) was established. The teaching of English was started in June 1885, and a new school-house was built about this time, a portion of the cost being met by bankers of the city. In the course of the next six years, schools for boys were opened at nine places in the districts, and one for girls was started at the capital in 1888; in this way, the number of educational institutions maintained by the Darbār in 1891-92 was twelve. The number of pupils on the rolls of the three schools at Bīkaner city (*i.e.*, the main, the branch, and the girls' school) was 664 (including seventy-seven girls), and the daily average attendance 373 (thirty-six girls); similar figures for the institutions in the districts are not available, but, judging from the returns for one or two previous years, it would seem that they were attended by some seven or eight hundred boys.

The succeeding decade witnessed (*i*) the opening of a school for the sons of Thākurs and other Rājputs of good birth (called the Walter Nobles' school) in April 1893; (*ii*) the closing of the branch school at the capital (or rather its amalgamation with the high school); and (*iii*) the establishment of another school for girls which, however, together with the older one, was closed in March 1898 and replaced by the Lady Elgin school. Including three new schools opened in the districts, there were altogether fifteen State institutions in 1901-02 as compared with twelve in 1891-92; the number on the rolls at the end of March 1902 was 1,935 (of whom 150 were girls), and the daily average attendance during the twelve months was 1,400 (including eighty-six girls).

Since then, considerable attention has been paid to education, and the department has been thoroughly reorganised; the staff employed is both numerically stronger and more efficient, and the educational institutions under the management of the Darbār now number thirty-eight. The increase is due partly to the opening of some new schools in the districts, but chiefly to the fact that classes or sections of schools, which up to 1904 were treated as part and parcel of the school itself, have since been shown as separate institutions. For example, the high school, besides its English and vernacular branches, contained four special classes for instruction in (*a*)

Hindī book-keeping, (b) police work, (c) the duties of a *patwārī*, and (d) *banika* (*i.e.* mental arithmetic and the general system of mercantile business and accounts as conducted in Mārwārī characters), but was shown as a single school till 1904, when these special classes were returned as separate educational institutions. The same remark applies to many of the district schools which have both Hindī and *banika* classes.

Reference is invited to Tables Nos. LXV and LXVI in Vol. III-B; the former is incomplete, inasmuch as figures regarding the attendance at the schools in the districts in 1891-92 are not forthcoming, but it gives a rough idea of the progress made during the last fifteen years. The other table contains a list of schools maintained by the State in September 1906, and it will be seen that the number on the rolls at the end of that month was 2,304 including 166 girls, and the daily average attendance during the year was 1,791, of whom 94 were girls. According to the census of 1901, children of school-going age (calculated at fifteen per cent. of the total population) numbered 87,695, namely 45,958 boys and 41,737 girls, and it may consequently be said that 4·65 per cent. of the boys and about 0·4 per cent. of the girls of school-going age were under instruction in September 1906. On the other hand, it should be remembered that our figures relate only to State institutions, and that there are many boys receiving an education at the numerous private indigenous schools.

Of the thirty-eight schools kept up by the Darbār five are anglo-vernacular secondary, twelve are vernacular primary, one is for girls, seventeen are what are known as *banika*, and in the remaining three special instruction is given in such subjects as book-keeping, office routine, police work and the duties of a *patwārī*. The annual cost of maintaining the above is about Rs. 31,000 and, adding to this the expenditure in connection with the Mayo College at Ajmer, the yearly outlay on education amounts to between Rs. 34,000, and Rs. 35,000, as compared with about half this sum in 1891-92 and Rs. 20,000 in 1898-99. No fees are charged anywhere; scholarships and prizes are awarded to successful students, and the boys are encouraged to qualify themselves for service in the State. The three principal institutions, all of which are at the capital, are noticed below.

Darbār high school.

The high school, as such, dates from the 8th June 1885 and was affiliated first to the Punjab University and next (in 1897) to the Allahābād University. Since the date just mentioned it has passed 28 boys for the Entrance and 34 for the Middle examinations. The staff consists of a head master and twenty-five assistant masters, and the school costs about Rs. 10,000 or Rs. 12,000 a year. The number on the rolls at the end of September 1907 was 416, and the daily average attendance during the year was 316.

Walter Nobles' school.

The Walter Nobles' school is named after the late Colonel Walter, who was the popular Agent to the Governor General in Rājputāna from 1887 to 1890 and spent the best part of his life in the Province; it was established in April 1893 for the benefit of

Rājput boys of good birth who were either too young or too poor to proceed to the Mayo College. Commencing in a small way as an adjunct to the high school, it secured for itself a separate staff and buildings (including a boarding-house with accommodation for twenty-four students) in September 1895, and is now in a flourishing condition. The education imparted aims at turning out the lads with such a practical knowledge of English, arithmetic, history, geography and the vernacular as may be useful to them in their future careers. The staff consists of a head master and eight teachers, and there were 77 boys on the rolls in September 1907, with a daily average attendance during the year of fifty-eight; the annual cost of maintenance is about Rs. 8,400. Outdoor games, riding and gymnastics are encouraged, dismounted drill is taught, and the school holds its own in athletic exercises.

Lady Elgin school for girls.

The girls' school commemorates the visit of Their Excellencies the Earl and Countess of Elgin to Bīkaner in 1896, and was opened on the 31st March 1898 when it took the place of two smaller schools. The Seths of Bīkaner subscribed half a lakh of rupees towards its construction. The number on the rolls at the end of September 1907 was 250 (as compared with 166 on the 30th September 1906), and the daily average attendance was 148. The girls, who are all Hindus, are taught reading, writing and elementary arithmetic in Hindī, besides plain sewing and embroidery; the yearly cost of maintenance is about Rs. 1,300.

MEDICAL. Early history.

The people of Bīkaner city first became acquainted with the European system of medicine about sixty years ago when a Dr. Coleridge was in medical charge of Mahārājā Ratan Singh's son, Sardār Singh. In a letter to the Political Agent, Jodhpur, dated the 2nd November 1864, Dr. Coleridge wrote as follows:—"From that time," *i.e.* October 1848, "I have not only been in attendance on the family of the Mahārājā, but he has allowed a liberal supply of medicines, and permitted me to administer them to all applicants without distinction. I have expended from six to eight hundred rupees a year for drugs, and from this time His Highness has authorised me to spend Rs. 1,000 annually for the same purpose. During the first years of my residence I had but few applications, and even then the medicines were frequently rejected from prejudice as to their composition. It is very different now; all apply to me for medical aid from the Brāhman to the Chamār, and all alike take my medicine without an enquiry as to its nature, and swallow it, whether solid or fluid; the usual number of applications for medicines varies from six hundred to one thousand a month. There is no place appointed for a dispensary; all applications are made directly to myself, and the medicines are kept under my own immediate supervision. The Mahārājā, I believe, fully appreciates the superiority of the British school of Medicine. I can only mention one important fact. He called on me to vaccinate his daughter, after explanation as to its benefits, thus leading the way on this important matter; and, as proof of confidence on the part of the chief inhabitants, their

wives come to consult me at my own house, as you may have observed during your short stay at Bīkaner,—a fact, I believe, unprecedented in Rājwāra. I have also reason to believe that my long residence among them has given them confidence in myself, as I am frequently consulted by the most influential classes, even in cases of midwifery. I have reason to believe that a dispensary in the city would be considered a great boon by the poor and weak invalids; that the inhabitants would willingly give towards its support; and that in no long time it might become self-supporting, or rather independent of external aid. I have done much for such patients, but the wants of a city containing about 80,000 inhabitants cannot be met by the exertions of one unaided medical man, and, as my residence is always near the Mahārājā, it is as impossible that those requiring assistance should come to me, as it is that I should be able to visit them at their own homes."

Dr. Coleridge left Bīkaner in January 1869, and in the following year a regular hospital was opened in the city; it and the small hospital attached to the Central jail were the only medical institutions in the State till 1885, when dispensaries were started at Reni, Sūjāngarh and Sūratgarh. An examination of Table No. LXVII in Vol. III-B will show the progress since made. By the end of 1891 there were eleven hospitals—the five above mentioned, and others at Bhādra, Churu, Nohar, Rājgarh, Ratangarh and Sardārshahr—and four dispensaries, namely one near the Agency, a second attached to the palace, and the other two at Dūngargarh and Hanumāngarh respectively. The provision of accommodation for in-patients at the two institutions last named, and the establishment of a couple of hospitals (one at the capital for the use of the Imperial Service camel corps, and the other at Mirzawāla) raised the number of hospitals to fifteen and reduced that of dispensaries to two by the end of 1901. **Progress between 1870 and 1901.**

Since then, the hospital at Mirzawāla has been closed, but dispensaries have been opened at Palāna colliery and Hanumāngarh—the latter solely for the benefit of the railway *employés*—and there are now eighteen medical institutions in Bīkaner territory. A detailed list will be found in Table No. LXVIII, and it will be seen that they have accommodation for 184 in-patients. Excluding the dispensary at Palāna, for which figures are not available, 122,383 cases were treated and 9,351 operations were performed in 1907, and the daily average number of patients was 960, namely 74 indoor, and 886 outdoor. All are maintained by the Darbār at an annual cost of about Rs. 46,000 and all except the camel corps hospital and the colliery dispensary are under the supervision of the Civil Surgeon. **Existing hospitals, etc.**

The principal hospital is at the capital, and is called after the late Rai Bahādur Seth Bhagwān Dās, a wealthy and munificent banker of Churu, who provided the necessary funds (about a lakh) for its construction and equipment. It was opened on the 20th July 1896, and is an excellent institution, equipped with the most modern surgical instruments and appliances and having accommodation for seventy in-patients; the operating theatre, recently added at **Bhagwān Dās hospital at the capital.**

a cost of more than Rs. 16,000, is one of the finest in Rājputāna. A hospital for women, to be called after the late Lady Curzon who laid the foundation-stone on the 25th November 1902, is still under construction; pending its completion, a wing of the Bhagwān Dās hospital with fourteen beds is set apart for the use of females.

Lunatic asylum.

Lunatics were formerly lodged in the jail, but a small asylum was built close by at a cost of about Rs. 4,000 and was opened in February 1890; the inmates are made as comfortable as possible, and some of the milder cases do a little work such as the grinding of corn, sewing, etc. In 1905-06, ten lunatics were treated, of whom seven were cured and three remained under observation. Insanity is not very common in this State, only eighty-seven lunatics (or nearly 1·5 persons in every 10,000) having been enumerated in 1901.

Vaccination.

An effort was made to introduce vaccination in 1860-61, when two trained men were sent here, but, notwithstanding the remonstrances of Dr. Coleridge, they were allowed to leave, and no work was done. Regular operations were started in 1881, when one man performed 108 successful vaccinations. Four years later, the staff was strengthened by the addition of a native Superintendent and five more vaccinators, and the number of the latter has since ranged between five (in 1886-87) and eighteen (in 1898-99 and 1901-02). Similarly, the number of successful operations has varied considerably during the last twenty years, *e.g.*, 12,531 in *1887-88* and 29,161 in *1899-1900*; the annual expenditure is rather less than Rs. 3,000. Some further details will be found in Table No. LXIX in Vol. III-B. In 1906-07, a staff of eleven men under the native Superintendent successfully vaccinated 21,800 persons, or 37·29 per mille of the population, at a cost of Rs. 2,761 or an average of twenty-four pies per case.

Vaccination is nowhere compulsory and is, on the whole, popular. The Mahājans strongly opposed it at first, and there are some, such as the Brāhmans of Pūlāsar (in the Sardārshahr *tahsīl*) and the Oswāls, who still hold out as they think that it enhances their dignity to refuse to let their children be vaccinated, but the people generally recognise the benefits conferred, and there is nothing like the trouble there used to be.

Sale of quinine.

The system of selling quinine in pice packets at post offices was introduced in November 1894, but there has never been very much demand for the drug. In 1905-06 only 140 packets of 7-grain doses were sold, but 1,465 were disposed of in 1906-07. The quinine was formerly supplied to postmasters by the State Medical department, but is now obtained direct from the Superintendent of the Alīgarh jail in the United Provinces.

Surveys.

Bīkaner was topographically surveyed by the Survey of India between 1875 and 1880, mostly on a scale of two miles to the inch, and the area, as calculated in the Surveyor General's office by planimeter from the standard sheets, is 23,311 square miles. The operations of the Great Trigonometrical Survey of India also extended to this State in 1874-75 and again in 1893-94, part of the country lying

within what is known as the Jodhpur Meridional Series. Of local surveys, there have been two, but only *khālsa* villages were dealt with. The first was in connection with the summary settlement of 1884—86 and was a very rough one; the maps were not drawn to scale and were little better than rude sketches, the fields having been plotted in for the most part by the eye, but they showed the general shape of the village boundaries and the approximate position of the fields within them. The second survey was a more regular one, and was carried out with the plane-table in the *khālsa* area excluding Anūpgarh and Tibi. In parts, the chain used was that known as the *pakkā jarīb*, 82½ feet in length, and a square of two chains was equal to one *pakkā bīgha* or five-eighths of an acre; elsewhere the chain was the local one, 63¾ feet in length, and a square of two of them was equal to one Bīkanerī *bīgha* or 0·37 of an acre. The maps were drawn to scales of eight or ten chains per inch, according as the longer or shorter chain was used, and these scales are equivalent to 220 and 212½ yards to the inch respectively; they are kept up to date by a trained staff of *girdāwars* and *patwāris*.

CHAPTER VI.

MISCELLANEOUS.

Bīkaner Nizāmat.—A district situated partly in the centre, but chiefly in the south-west of the State of the same name, with an area of about 9,779 square miles. It is made up of the *tahsīls* of Bīkaner and Lūnkaransar, and the *sub-tahsīls* of Magrā and Sūrpura, and in 1901 contained one town (Bīkaner city) and 537 villages; of the latter, 110 were *khālsa*, and the rest were held by *pattādārs* and others on favoured tenures. The population decreased from 281,173 in 1891 to 194,297 in 1901, or by nearly thirty-one per cent., and at the last enumeration more than 83 per cent. of the inhabitants were Hindus and nearly 11 per cent. Musalmāns. The principal castes were Jāts (30,303); Rājputs (24,326, including 4,185 who returned themselves as Muhammadans); Brāhmans (23,445); Mahājans (22,152); and Chamārs (19,057). The *khālsa* area for which returns relating to agriculture exist is nearly 600 square miles, of which about 560 square five miles are available for cultivation; the average annual area cultivated during the last years has been 67 square miles, and the principal crops are *bājra*, *moth*, minor millets and pulses, and a little *til*.

Bīkaner Tahsīl.—The central *tahsīl* of the district or *nizāmat* of the same name; it contains one town (Bīkaner city) and 166 villages, only fifty-five of the latter being *khālsa*. Between 1891 and 1901 the population decreased by 14·6 per cent. or, if Bīkaner city be excluded, by 29 per cent. At the last census the inhabitants numbered 101,270, more than three-fourths of whom were Hindus, and the principal castes were Brāhmans (15,566); Mahājans (13,752); Rājputs (11,006, including 3,366 Musalmāns); and Jāts (8,914). The Jodhpur-Bīkaner Railway traverses the eastern half of the *tahsīl*, and from Gigāsar a branch line runs for a distance of nearly ten miles to the Palāna colliery (described at pages 349-50 *supra*). The city of Bīkaner is dealt with in a separate article below, and the only other place of note is the estate of Pūgal in the west, which is held by one of the principal nobles who is a Bhāti Rājput and is styled Rao, and which yields a yearly revenue of about Rs. 20,000. The milch cows and plough-bullocks reared here are famous. The village of Pūgal is one of the oldest of these regions, and is said to have been taken by the Bhātis from the Paramāras in the middle of the ninth century. It will be remembered that when Rao Bīka invaded the country nearly 450 years ago he took to wife the daughter of Rao Shekha of Pūgal, and several of his successors have married ladies of the same family. Elphinstone passed through the tract on his way to Kābul, and described it as "a sea of sand without a sign of vegetation." The present Rao is Jeorāj Singh who succeeded his father in May 1903 and is now about twenty

years old; his estate of forty-eight villages is under the management of the Court of Wards.

Lūnkaransar Tahsīl.—The northernmost *tahsīl* of the Bīkaner *nizāmat*, containing 163 villages of which only twenty-three are *khālsa*; it takes its name from the small village of Lūnkaransar which was called after Rao Lūnkaran, the third chief of this State, and is the headquarters of the *tahsīldār*. The population of the *tahsīl* fell from 61,251 in *1891* to 32,390 in *1901*, or by forty-seven per cent., and at the last enumeration nearly nine-tenths of the inhabitants were Hindus. The principal castes were Jāts (10,045); Chamārs (3,861); Rājputs (3,114, including 625 Musalmāns); and Brāhmans (2,968). The Jodhpur-Bīkaner Railway traverses the eastern half of the *tahsīl*, and the station of Lūnkaransar is about fifty miles north-east of the capital. The village is utterly devoid of sweet water, and in the vicinity is the salt-lake described at page 350 *supra*; some eight or nine miles to the south-west, and close to the railway line, are the Dalmera quarries which yield excellent red sandstone. About twenty miles north by north-east of Lūnkaransar is the small town of Mahājan, the headquarters of an estate which is held by a Rāthor Rājput, a descendant of Ratan Singh who was a son of Rao Lūnkaran; he is styled Thākur and, though shorn of a considerable portion of his possessions, is still the premier noble of Bīkaner. The estate now consists of seventy-six (populated) villages worth about Rs. 55,000 a year, and an annual tribute of Rs. 15,374 is paid to the Darbār. The present Thākur is Hari Singh who was born in 1877, succeeded by adoption in 1883, was educated at the Mayo College, and is one of the Secretaries in the *Mahakma khās* and a member of Council.

Magrā Sub-tahsīl.—A *sub-tahsīl* in the south-west of the Bīkaner *nizāmat*, bounded on the west by Jaisalmer and on the south by Jodhpur. It was formerly part of the Sūrpura *tahsīl*, but it was made a separate charge in 1904; for this reason, nothing is known of the number of inhabitants in 1901, but there are said to be 108 villages, of which seventeen are *khālsa*. The soil is mostly level, firm and somewhat stony, and fairly productive under good rainfall. The headquarters of the *naib-tahsīldār* were formerly at the village of Kolait, about twenty-five miles south-west of the capital, but have recently been transferred to Madh, a couple of miles to the north-west. Kolait possesses a small lake, on the banks of which are bathing *ghāts* and some fine *pīpal* trees, and a fair is held here annually in October or November. An irrigation tank has recently been constructed at Madh, and fullers' earth (*Multāni mitti*) is quarried in the vicinity. The village of Pilāp has also its irrigation tank, while to the north-east, and nineteen miles by metalled road from Bīkaner city, lies the picturesque lake of Gajner (see page 310) famous for its sand-grouse shooting.

Sūrpura Sub-tahsīl.—A *sub-tahsīl* situated in the south-east of the Bīkaner *nizāmat* and bounded on the south by Jodhpur. In 1901 it contained 208 villages and 60,637 inhabitants (chiefly Jāts, Rājputs, Chamārs and Mahājans), but, as stated in the preceding article, it

was rearranged in 1904 into two separate *sub-tahsīls*, Kolait (now called Magrā) and Sūrpura. The latter charge comprises 100 villages, fifteen of which are *khālsa*. The *naib-tahsīldār* has his headquarters at the village of Sūrpura, which is close to the station of the same name on the Jodhpur-Bīkaner Railway and twenty-five miles south of the capital. The only place of any interest is Deshnok, nine miles to the north-west, where the chief temple of Karnījī, the tutelary deity of the ruling family, is to be found. In former times no outlaw taking refuge in this shrine could be arrested, but this custom was abolished in 1870.

Bīkaner City [The settlement or habitation (*ner*) of Bīka].—The capital of the State, and the headquarters of the *nizāmat* and *tahsīl* of the same name, situated on the Jodhpur-Bīkaner Railway in 28° N. and 73° 18′ E., 1,340 miles by rail north-west of Calcutta and 759 miles almost due north of Bombay. It is the fourth largest city in Rājputāna, and its population at each of the three enumerations, was: 33,154 in *1881*; 50,513 in *1891*; and 53,075 in *1901*. In the year last mentioned, Hindus numbered 38,796 or more than 73 per cent. of the population; Musalmāns 10,191 or more than 19 per cent.; and Jains 3,936 or 7 per cent.; there were also a few Christians, Sikhs, Pārsīs and Aryās. The most numerous castes were Brāhmans (11,543); Mahājans (8,012, chiefly of the Mahesrī and Oswāl divisions); Rājputs (2,623 including, however, 653 Musalmāns); Mālis (1,950); and Sonārs (1,764).

The city, which was founded in 1488, is situated on a slight elevation about 736 feet above the sea and has an imposing appearance, being surrounded by a fine wall crowned with battlements, and possessing many lofty houses and temples and a massive fort. The wall, 4½ miles in circuit, is built wholly of stone, and has five gates, called respectively Kot, Jassūsar, Nathūsar, Sītla and Gogā, and eight sally-ports. It is six feet thick, and from fifteen to thirty feet high, including a parapet 6 feet high and two feet thick. There is a ditch, about fifteen feet in depth and twenty in breadth, on three sides only, the ground on the southern face being intersected by ravines which have broken up the whole plain in that direction.

The old fort, built by Bika three years before he founded the city, is picturesquely situated on high rocky ground close to the wall on the south-west; it is small and now rather a shrine than a fort. Near it are the cenotaphs of Bīka and two or three of his successors, as well as those of some persons of less note; Bīka's cenotaph, called the Tekrī, was originally built of red sandstone but has since been re-erected in marble. The larger fort is more modern, having been built by Rājā Rai Singh between 1588 and 1593; it contains the old palaces and is situated about three hundred yards from the Kot gate of the city. It is 1,078 yards in circuit, with two entrances, each of which has three or four successive gates, and its rampart is strengthened by numerous bastions about forty feet high and a moat running all round in a direction parallel to the curtains without following the curve of the bastions. The moat is thirty feet wide at

the top but narrow at the bottom, and from twenty to twenty-five feet in depth. This fort has been besieged several times, but is said to have never been taken, though the old one once was. The palace buildings, some of which are handsomely decorated with coloured plaster, are the work of successive chiefs, nearly every one of whom has contributed something. Among the finest are the Chaubāra erected by Rājā Rai Singh; the Phul Mahal, the Chandar Mahal, the Gaj Mundir and the kacheri, all built by Mahārājā Gaj Singh; the Anūp Mahal, perhaps the best of them all, and dating from Mahārājā Sūrat Singh's time; and the Chhatar Mahal and Chīnī Burj of Mahārājā Dūngar Singh. The latest addition is the spacious audience hall called Ganga Niwās after the present chief; it is a very handsome room, the interior being of carved red sandstone, the ceiling of carved wood, and the floor of marble, but being of different material and architectural style, it does not blend very well with its surroundings. A fine library of Sanskrit and Persian books will be found in the Kārkhāna* kalān, and the armoury is well worth a visit.

The city is irregularly square in shape and contains many good houses, faced with red sandstone richly carved—the tracery being called *khudai* or *manowat*—but the majority of them are situated in narrow tortuous lanes where they can scarcely be seen. The poorer buildings are besmeared with a sort of reddish clay, abundant in the adjacent ravines, which gives the place an appearance of neatness and uniformity, the walls being all red and the doors and windows outlined in white. The north-western portion, where the richest bankers reside, was so much congested that it was found necessary to extend the wall in that direction so as to bring in a considerable area of habitable land; this is being rapidly built over, while in the north and east, where formerly there were only a few small houses, such public institutions as the jail, hospital, high and girls' schools, post office and district courts have been erected. The total number of wells in the city and fort is forty-five, of which five are fitted with pumping engines; water is found from three to four hundred feet below the surface and, though not plentiful, is generally excellent in quality. Outside the Kot gate is the Alakh Sāgar well, built by the Alakhgīr sect (see pages 337-38 *supra*); it is the finest in the State, and water is being constantly drawn from its four sides and carried into the city either in large earthen jars or the ordinary leathern *pakhāls*. There are ten Jain monasteries (*upāsāras*) which possess many Sanskrit manuscripts, 159 temples, and twenty-eight mosques, but none of these buildings is particularly striking in appearance. The large Jain temple in the south-west, known as Bhandāsar, is said to be older than the city, having been built by an Oswāl Mahājan called Bhanda in or about 1468; another to Nemināth has been attributed to Bhanda's brother. The principal Hindu temple is that of Lakshmī Nārāyan, constructed by Rao Lūnkaran (1504—26); next comes that of Rāj Ratan Bihārijī,

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* The books and arms will shortly be removed to the Prince of Wales' Hall, a handsome building near the club, which is approaching completion.

built in 1850 and belonging to the Vallabhāchārya sect, the Mahārāj Gosain of which has many devotees here. The third in rank is the temple of Dhūni Nāth, erected by a Jogī of that name in 1808; it is situated close to the eastern wall, and is also known as Panch Mandir as it contains the images or symbols of the five deities—Brahmā, Vishnu, Mahesh, Sūrya and Ganesh. Lastly, the shrine at Nāgnechiji, a mile to the south-east of the city, has a considerable reputation as possessing one of the relics of Kanauj, namely an eighteen-armed image of Devī brought from Jodhpur by Rao Bīka shortly before his death (see page 315 *supra*).

Bīkaner has long been famous for a white variety of sugar-candy; moist sugar is imported from the United Provinces and is first refined and then boiled quickly again for crystallisation into clear white candy. The woollen shawls, blankets and carpets made at the jail—particularly the carpets—are well known and find a ready sale. The municipality, the Central jail, and the educational and medical institutions have all been noticed to some extent in the last chapter. The municipal committee has done much since its establishment in 1889 to improve the sanitation and lighting of the city. A number of metalled roads have been constructed, and the principal* one, leading from the new palace past the club to the fort, is lit by electric light. The jail has accommodation for 590 prisoners, and is probably the best in Rājputāna.

Outside the city the principal buildings are the Mahārājā's new palace called Lālgarh, a magnificent edifice of carved red sandstone, designed by Colonel Sir Swinton Jacob and fitted with electric light and fans; the Victoria Memorial Club, erected from public subscriptions and complete in every respect with lawn-tennis courts, racquet court, skating-rink, polo and football grounds and pavilions, swimming-bath, race-course, etc., close by; the public offices or Ganga Kacheri; the lines and hospital of the camel corps; the Agency; the guest-house; and several houses occupied by officials. Five miles to the east of the city is Devī Kūnd, the cremation tank of the rulers of Bīkaner subsequent to Jet Singh (1541). On the sides of this reservoir are ranged the cenotaphs of the chiefs commencing with Rao Kalyān Singh and ending with Mahārājā Dūngar Singh, as well as those of their respective wives and families; several of them are handsome structures with graceful pillared domes, the under-surfaces of which have fine enamel work, but in many cases these decorations have been wholly or partially obliterated by dust-storms and the intense heat. The material used prior to about 1828 was red sandstone from Dalmera for the building itself and Makrāna marble for the commemorative tablets, but since then all the more important cenotaphs have been constructed entirely of marble. On some of the commemorative stones will be seen, sculptured in bas-relief, the figure of the chief on horseback, while in front of him, standing in order of precedence,

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* All the main roads will shortly be lighted in the same way.

are the wives, and behind and below him the concubines, etc., who mounted his funeral pile. This is the general rule but, in the case of Anūp Singh, there are three concubines, as well as two Rānīs, in front of him; the Rānīs can be distinguished from the others (i) because they are nearer the horse and (ii) because they stand on a pedestal. The tablets in the *chhatris* of Zorāwar Singh and Karan Singh tell us that twenty-two and nineteen females were respectively burnt with the corpse of their lord and master and, in Karan Singh's case, the names of all the ladies are given. The cenotaph of Mahārājā Rāj Singh is noteworthy as containing the figure of a man, Sangrām Singh, who was burnt on his pyre, while that of Mahārāj Motī Singh, the second son of Mahārājā Sūrat Singh, who died in 1825, is of special interest as commemorating the last distinguished *satī* in Bīkaner. The lady depicted is Dīp Kunwar, the wife of Motī Singh and a daughter of the Udaipur ruling family; a fair is held here in her honour in Bhādon (August-September). Near the tank is a palace for the convenience of the chief and the *zanāna* when they have occasion to attend ceremonies here, and a large garden was added by the late Mahārājā. About half-way between Devī Kūnd and the city, but at some distance to the south of the road, is a fine, though modern, temple dedicated to Siva with a garden and tank in the vicinity; the place is called Sheo Bāri.

Reni Nizāmat.—A district situated in the east of the Bīkaner State and having an area of about 4,755 square miles. It is made up of the *tahsīls* of Bhādra, Churu, Nohar and Rājgarh, and the *sub-tahsīl* of Reni, and in 1901 contained four towns (Churu, Nohar, Rājgarh and Reni) and 648 villages, of which 199 were *khālsa*. The population decreased from 258,451 in *1891* to 175,113 in *1901*, or by more than thirty-two per cent., and at the last enumeration nearly nine-tenths of the inhabitants were Hindus. The principal castes were Jāts (55,116); Brāhmans (18,227); Chamārs (17,403); Mahājans (14,849); and Rājputs (10,955, including 1,091 who returned themselves as Muhammadans). Agricultural statistics are available for about 866 square miles of *khālsa* lands, and the average annual area cropped during the last five years has been 293 square miles. Nearly one-half of this was under *bājra*, and another hundred square miles under minor millets and pulses; gram usually occupies about thirteen square miles and oil-seeds between four and five, while *jowār*, barley, wheat, cotton and tobacco are all cultivated to a small extent. The irrigated area has ranged between 169 and 691 acres, and averages 460, namely 212 from canals, 200 from wells, and 48 from other sources. The Western Jumna canal sometimes supplies water to the Bhādra *tahsīl* where, as also in Rājgarh, some wells are to be found, and in years of heavy rainfall the Kātli river benefits a few villages in the south-east. The soil in the north-west is sandy, but improves as one approaches the Hissār border where it is firmer and more level and contains a considerable quantity of loam, and where also the rainfall is better. There is no railway in the district, but the line referred to at page 353 is to pass through the south of the Churu and Rājgarh *tahsīls*.

Bhādra Tahsīl.—A *tahsīl* in the north-east of the Reni *nizāmat*, containing 109 villages of which ninety-three are *khālsa*; it is bounded on the north and east by the British District of Hissār. The population fell from 47,649 in *1891* to 31,994 in *1901*, or by nearly thirty-three per cent., and at the last enumeration more than nine-tenths of the inhabitants were Hindus. The principal castes were Jāts (14,151, mostly of the Beniwāl section); Chamārs (3,265); Mahājans (2,781, chiefly of the Agarwāl division); and Brāhmans (2,129). The soil is generally a sandy loam, becoming more level and loamy towards the east; the yearly rainfall averages about 8¾ inches, and a considerable area is cultivated. The principal crops are *bājrā* and *moth* in about equal proportions in the autumn, and gram, or gram and barley mixed, and a little mustard and rape-seed in the spring; a few small plots of tobacco and vegetables are watered by wells. The Western Jumna canal sometimes affords irrigation to about half a dozen villages, but the supply of water is never great, and as the canal was constructed by Government, no tax is levied by the Darbār.

The *tahsīl*, or the greater part of it, was formerly the estate of one of the three great nobles of Bīkaner who belonged to the Kāndhalot sept of the Rāthor Rājputs; he was, however, at constant variance with the Darbār and was, after prolonged contests, finally dispossessed in 1818 with the assistance of a British force and he now holds but three or four villages by way of maintenance. The Sikhs whom he had called in were expelled, and the tract (excluding the fort, which was handed over to the Darbār) remained for four years in the possession of the British Government as security for the payment of the cost of the expedition.

The headquarters of the *tahsīl* are at the small town of the same name, which is situated in 29° 6′ N. and 75° 11′ E., about 136 miles north-east of Bīkaner city and thirty-five miles almost due west of Hissār. Population (1901) 2,651. The town possesses a fort, a post office, a couple of vernacular schools attended by 100 boys, and a hospital which has accommodation for seven in-patients.

Churu Tahsīl.—The southernmost *tahsīl* of the Reni *nizāmat*, bounded on the south by the Shekhāwati district of Jaipur; it contains one town (Churu, the headquarters of the *tahsīldār*) and 102 villages, of which only seven are *khālsa*. The population decreased from 55,060 in *1891* to 43,119 in *1901* or by nearly twenty-two per cent., and in the year last mentioned more than four-fifths of the inhabitants were Hindus. The principal castes were Jāts (7,359); Brāhmans (5,698); Mahājans (4,680, chiefly of the Agarwāl division); Chamārs (4,199); and Rājputs (3,214, including ten Musalmāns). The soil is sandy and only *kharīf* crops are grown. Like Bhādra, the greater portion of the tract was held by an influential Thākur who belonged to the Kāndhalot sept of the Rāthors and was constantly contending with the Darbār. Elphinstone in 1808 described him as "a dependent, rather than a subject, of the Rājā of Bīkaner." Five years later, Sheo Singh (then Thākur) was besieged in his fort and, being reduced

to great straits, is said to have swallowed a diamond and died. Churu fell into the hands of the Darbār, but was shortly after recovered by the Thākur's successor (Prithwī Singh) with the help of Amīr Khān; he held it till 1818 when the Darbār resumed possession. In 1854 the Thākur again surprised and seized the fort, but he was immediately ousted and deprived of his estate by Mahārājā Sardār Singh. Five villages were, however, given to him for his maintenance, and these have been held by his successors; the income is small but no tribute is paid to the Darbār. The late Thākur, Lāl Singh, was a member of Council from 1890 to 1903, and received the title of Rao Bahādur from the British Government in 1901; his death on the 30th December 1903 was a loss to the administration. He has been succeeded by his son, Pratāp Singh, who was born in 1882.

Nohar Tahsil.—A *tahsīl* in the north and north-west of the Reni *nizāmat*, bounded on the north-east by the Hissār District; it contains one town (Nohar) and 170 villages, of which only twenty-one are *khālsa*, the rest being held by *pattādārs* who are mostly Rāthors. The population decreased from 74,437 in *1891* to 42,011 in *1901*, or by 43½ per cent., and in the year last mentioned more than ninety-two per cent. of the inhabitants were Hindus. The principal castes were Jāts (15,596); Brāhmans (5,138); Chamārs (4,093); Mahājans (2,482, chiefly of the Agarwāl and Mahesrī divisions); and Rājputs (2,391, including 296 Musalmāns). The western portion of the *tahsīl* is included in the central sandy tract, while in the eastern half the soil is a sandy loam very similar to that of Bhādra, though inferior to it. The main *kharīf* crops are *bājra* and *moth*, and a certain amount of *rabi* cultivation is possible in the north-east when rain falls at the proper time.

At Gogāno, a village in the north-east, a cattle fair is held in August and September and is attended by from ten to fifteen thousand people; it is called the Gogāmeri fair after Gogā, a Chauhān Rājput, who became a Musalmān and is said to have held sway from Hānsi to the Sutlej in the thirteenth century. Many of the village folk believe that a visit to his shrine renders them immune from snake-bite. About a mile away is a place known as Gorakh Tila, which is pointed out as the former residence of a local celebrity named Gorakh Nāth, of whom, however, nothing is known except that he was a very devout ascetic.

Rājgarh Tahsīl.—A *tahsīl* in the south-east of the Reni *nizāmat*, bounded on the east by the Hissār District and the Lohāru State, and on the south by the Shekhāwati district of Jaipur. It contains one town (Rājgarh) and 187 villages, sixty-eight of which are *khālsa*. The population decreased from 57,544 in *1891* to 39,282 in *1901*, or by nearly thirty-two per cent., and at the last census more than nine-tenths of the inhabitants were Hindus. The principal castes were Jāts (14,296); Chamārs (3,988); Brāhmans (3,055); Mahājans (3,055, chiefly of the Agarwāl division); and Rājputs (2,869, including 469 Musalmāns). As the majority of the Jāts belong to the Pūniya clan, the country used to be locally known as

the Pūniya *pargana*. The *tahsīl* may be described as a tract of light, uneven, sandy soil, but the *tības* or sand-ridges are less high and more culturable than in the regions to the west, and extensive *tāls* or level stretches of firmer soil, often loamy—especially in the south-east—are not uncommon. There is a little *rabi* cultivation in the north-east when the rainfall is propitious, and in the few villages, where wells suitable for irrigation exist small plots of tobacco and vegetables will be found, but, speaking generally, only autumn crops are grown. When the rains are heavy, the Kātli river flows into the *tahsīl* as far as Bairāsar (about sixteen miles from the Jaipur boundary), and its water is utilised for agricultural purposes. The village of Dadrewa on the western border is said to have once been the headquarters of the Musalmān Chauhān saint Gogā, referred to in the preceding article on the Nohar *tahsīl*, and a small fair is held in his honour at this place in Bhādon (August-September).

Reni Sub-tahsīl.—A *sub-tahsīl* in the centre of the *nizāmat* of the same name, containing one town (Reni) and eighty villages, ten of which are *khālsa*. The population fell from 23,761 in *1891* to 18,707 in *1901*, or by about twenty-one per cent., and at the last enumeration eighty-seven per cent. of the inhabitants were Hindus. The principal castes were Jāts (3,714); Brāhmans (2,207); Mahājans (1,891, mostly of the Agarwāl division); Chamārs (1,858); and Rājputs (1,522, including sixty-six Musalmāns). The soil is very similar to that of the Churu *tahsīl* to the south. At the time of the Rāthor invasion the tract was held by Chāyal and Khīchī Rājputs, from whom it was wrested partly by Rao Bīka and partly by his son Lūnkaran; the latter made it over to his sixth son, Karan Singh, and it appears to have become *khālsa* soon afterwards.

Churu Town.—The headquarters of the *tahsīl* of the same name in the Reni *nizāmat*, situated in 28° 18′ N. and 74° 59′ E., about one hundred miles east of Bīkaner city and close to the Shekhāwati frontier. The town is said to have been founded by, and named after, a Jāt called Chuhru in or about 1620. Elphinstone who visited it in 1808 described it as being nearly "a mile and a half round, without counting its large but mean suburbs; and, though situated among naked sand-hills, it has a very handsome appearance. The houses are all terraced, and both they and the walls are built of a kind of limestone of so pure a white that it gives an air of great neatness to everything composed of it. It is, however, soft and crumbles into a white powder, mixed here and there with shells; it is found in large beds in many parts of the desert." Churu is the home of many wealthy bankers who have business connections all over India and, as a mart, ranks next to Bīkaner. The population at the three enumerations was:—10,666 in *1881*; 14,014 in *1891*; and 15,657 in *1901*, and the railway line, which is to run past the place, will doubtless do much to further trade and attract merchants. At the last census nearly seventy per cent. of the inhabitants were Hindus and more than twenty-five per cent. Musalmāns. Like the greater part of the *tahsīl* of the same name, Churu was formerly

included in the estate of one of the leading nobles, who was, however, finally dispossessed about fifty years ago; one of the Thākurs (Kushāl Singh) is said to have built the fort in 1739. The town possesses several fine mansions and *chhatris* (cenotaphs); some magnificent wells; a combined post and telegraph office; several private schools for boys, one of which, an anglo-vernacular institution, is maintained by a local banker; and an excellent hospital. The last was the gift of a munificent citizen, the late Seth Bhagwān Dās, and has accommodation for fifteen in-patients.

Nohar Town.—The headquarters of the *tahsīl* of the same name in the Reni *nizāmat*, situated in 29° 11′ N. and 74° 47′ E., about 129 miles north-east of Bīkaner city and fifty-eight miles west of Hissār. The population decreased from 5,655 in *1891* to 4,698 in *1901*, or by nearly seventeen per cent., and in the year last mentioned nearly three-fourths of the inhabitants were Hindus. The town possesses a fort (now in rather a dilapidated condition); a post office; two vernacular schools attended by 94 boys; and a hospital with accommodation for seven in-patients.

Rājgarh Town.—The headquarters of the *tahsīl* of the same name in the Reni *nizāmat* situated in 28° 39′ N. and 75° 24′ E., about 135 miles east by north-east of Bīkaner city. The population decreased from 4,677 in *1891* to 4,136 in *1901*, or by between eleven and twelve per cent., and at the last census more than fifty-five per cent. of the inhabitants were Hindus and about thirty-seven per cent. Muhammadans. The town was built by Mahārājā Gaj Singh about 1766, and was named after his son Rāj Singh; it possesses a fort (erected under Gaj Singh's orders by his minister, Mehta Bakhtāwar Singh); a post office; an anglo-vernacular and two vernacular schools attended by 147 boys; and a hospital with accommodation for seven in-patients.

Reni Town.—The headquarters of the *nizāmat* and *sub-tahsīl* of the same name, situated in 28° 41′ N. and 75° 3′ E., about 120 miles north-east of Bīkaner city. The population decreased from 6,553 in *1891* to 5,745 in *1901*, or by more than twelve per cent., and in the year last mentioned nearly three-fourths of the inhabitants were Hindus and one-fifth Musalmāns. The traditional founder is a Rājā Reni Pāl, who lived some centuries ago; in the time of Jaswant Singh, the last of Reni Pāl's race, the country was ruined by seven consecutive famines, and the Chāyal Rājputs seized the town and adjacent villages; they were in turn dispossessed by the Rāthors under Rao Bīka towards the end of the fifteenth century. The town is walled, and possesses a handsome Jain temple built in 942 A.D. so solidly that the masonry is almost as strong now as when new; a fort constructed in the time of Mahārājā Sūrat Singh; several cenotaphs; a post office; two vernacular schools attended by 74 boys; a jail with accommodation for eighty-six prisoners; and a hospital with beds for seven in-patients. Raw hides and *chhāgals* (leathern water-bags) manufactured at Reni are exported in considerable numbers.

Sūjāngarh Nizāmat.—A district situated in the south-east of the Bīkaner State, bounded on the south by Jodhpur and on the south-east by the Shekhāwati district of Jaipur, and having an area of about 3,705 square miles. It is composed of the *tahsīls* of Sardārshahr and Sūjāngarh and the *sub-tahsīls* of *Bīdāsar, Dūngargarh and Ratangarh, and in 1901 contained three towns (Ratangarh, Sardārshahr and Sūjāngarh) and 436 villages, of which only thirty are *khālsa*. The population decreased from 208,875 in *1891* to 147,172 in *1901*, or by 29½ per cent., and at the last enumeration nearly eighty-eight per cent. of the inhabitants were Hindus. The principal castes were Jāts (28,963); Brāhmans (19,845); Mahājans (17,631); Rājputs (16,790, inclusive of 202 Musalmāns); and Chamārs (15,950). The country forms a plain of the lightest class of sandy soil, broken here and there by ridges of almost pure sand, and there is practically only one harvest, the *kharīf*. The *khālsa* area for which agricultural statistics exist is 140 square miles, of which 135 square miles are available for cultivation; the average annual area cropped during the last five years has been about 46 square miles, of which *bājra* occupied just one-half and the minor millets and pulses nearly all the rest. Oil-seeds are grown to a small extent, and small patches of barley, *jowār*, tobacco and wheat are usually to be seen, but the irrigated area averages only seventy-five acres and the water is obtained entirely from *kachchā* wells, the construction of which is possible in the south. There is as yet no railway in the district, but a line is to pass through the eastern half of the Sūjāngarh *tahsīl* and the Ratangarh *sub-tahsīl*.

Sardārshahr Tahsīl.—The northern *tahsīl* of the Sūjāngarh *nizāmat*, containing one town (Sardārshahr) and 187 villages, thirteen of which are *khālsa*. The population fell from 81,792 in *1891* to 49,639 in *1901*, or by more than thirty-nine per cent., and in the year last mentioned nearly nine-tenths of the inhabitants were Hindus. The principal castes were Jāts (10,804, chiefly of the Sāran family); Brāhmans (8,952); Mahājans (5,320, mostly Oswāl Jains); Chamārs (5,085); and Rājputs (4,286, including seventy-five Musalmāns). The *tahsīl* used to be called Bharūtia from the quantity of *bharūt* grass which always grows there. The villages are very small; large cattle are not numerous, but sheep and goats are extensively bred.

Sūjāngarh Tahsīl.—The southern *tahsīl* of the *nizāmat* of the same name, bounded on the south by Jodhpur and on the east by Shekhāwati, and containing one town (Sūjāngarh) and 151 villages, of which only eight are *khālsa*. The population decreased from 72,591 in *1891* to 53,483 in *1901*, or by more than twenty-six per cent., and the principal castes enumerated at the last census were Jāts (10,166); Rājputs (7.414, including ninety-four Musalmāns); Chamārs (6,612); Mahājans (6,178, chiefly Oswāls); and Brāhmans (4,827). The tract is remarkable as containing a strip of country,

* A temporary arrangement only.

extending for about sixteen miles north of Sūjāngarh town and having a breadth of six or seven miles, wherein water is near, often very near, the surface; indeed, nowhere in the *tahsīl* is it necessary to dig down to the same depths as in other parts of the State. The water, however, is not of much use to the agriculturist because never more than the upper three feet are sweet, and this quantity of course diminishes in the hot weather; below is a stratum of pernicious water, and if this be tapped, the well is spoilt for all practical purposes. Moreover, the sweet water is only comparatively so, and the quality varies considerably from time to time. For years a well may produce potable water which, as though touched by some malicious magician's wand, will suddenly become brackish and useless, and after continuing so for a time, will change again and recover its former reputation. Large wells worked by bullocks are consequently not to be seen, and water is raised from small shallow excavations by means of the weighted pole and bucket (*dhenklī*); in this way patches of ground can be irrigated, and insignificant crops of barley, tobacco and vegetables raised.

Another noticeable feature is the group of eight or nine rocky hills in the south. In one of them, near Bīdāsar and Darība, copper ore is found, but the mine has not been worked for many years; two in the vicinity of Gopālpura, the highest of which is 1,651 feet above the sea, have shrines upon them. About eight miles almost due north of Sūjāngarh town is the Chhāpar lake, where salt of an inferior quality was once manufactured; the excellent grass found here has already been noticed (pages 311 and 345). The desirability of making some use of the water which the lake contains after fairly heavy rains is under the consideration of the Darbār.

Legend says that where the village of Gopālpura now stands there was in old days a city called Dronpur, built by and named after Drona, the tutor of the Pāndavas, who also ruled over all the adjacent territory. Subsequently, the tract passed into the possession of a branch of the Paramāra Rājputs who, it is said, occupied it for fifteen hundred years when they were expelled by the Bāgri Rājputs from Nāgaur in Jodhpur. The latter were followed by the Mohils (a sept of the Chauhān Rājputs), who were in turn ousted by the Rāthors in the fifteenth century. The country was made over by Rao Bīka to his brother Bīda and, as the majority of the villages are held by descendants of the latter (Bīdāwats), it is often called Bīdāwati. The principal *pattādārs* are the Thākurs of Bīdāsar and Sāndwa.

Dūngargarh Sub-tahsīl.—A *sub-tahsīl* situated in the west of the Sūjāngarh *nizāmat* and containing thirty-two villages, of which seven are *khālsa*. The population decreased from 16,731 in *1891* to 12,641 in *1901*, or by nearly 24½ per cent., and in the year last mentioned more than ninety-two per cent. of the inhabitants were Hindus. The most numerous castes were Jāts (3,350); Brāhmans (1,691); Mahājans (1,606); Rājputs (1,530, including six Musalmāns); and Chamārs (1,518). The *sub-tahsīl* lies within the central sandy tract, and only autumn crops are grown. The headquarters of the *naib-*

tahsīldār are at the small town of Dūngargarh, which is about forty miles east of Bīkaner city and was founded by and named after Mahārājā Dūngar Singh in 1880. It possesses a post office, a hospital (under a *hakīm* or native physician), and two vernacular schools, and in 1901 contained 2,683 inhabitants.

Ratangarh Sub-tahsīl.—A *sub-tahsīl* situated in the east of the Sūjāngarh *nizāmat* and bounded on the east by Shekhāwati; it contains one town (Ratangarh) and sixty-six villages, of which only two are *khālsa.* The population fell from 37,761 in *1891* to 31,409 in *1901,* or by nearly seventeen per cent., and the principal castes at the last enumeration were Jāts (4,643); Mahājans (4,527); Brāhmans (4,375); and Rājputs (3,560, including twenty-seven Musalmān females). The tract, with the Sūjāngarh *tahsīl* to the south, was formerly called Bīdāwati because most of the villages were (and still are) held by descendants of Bīda, the brother of Rao Bīka.

Ratangarh Town.—The headquarters of the *sub-tahsīl* of the same name in the Sūjāngarh *nizāmat,* situated in 28° 5′ N. and 74° 37′ E., about eighty miles almost due east of Bīkaner city and ten miles from the Shekhāwati border. The population at the three enumerations was:—7,580 in *1881*; 10,536 in *1891*; and 11,744 in *1901.* In the year last mentioned, more than seventy-eight per cent. of the inhabitants were Hindus and about seventeen per cent. Musalmāns. The town was founded on the site of a village called Kolāsar by Mahārājā Sūrat Singh at the end of the eighteenth century, and was improved by his successor, Ratan Singh, who gave it his name. It is surrounded by a low stone wall, and possesses a small fort; a neatly laid out and broad bazar; some fine houses, the property of wealthy Mahājans; a combined post and telegraph office; one or two private vernacular schools; and a hospital with accommodation for seven in-patients. In and near the town are several masonry reservoirs and wells; the water of the latter, besides being very good, is comparatively near the surface, and is used for vegetable gardens.

Sardārshahr Town.—The headquarters of the *tahsīl* of the same name in the Sūjāngarh *nizāmat* situated in 28° 27′ N. and 74° 30′ E., about seventy-six miles north-east of Bīkaner city. The population at the three enumerations was:—5,824 in *1881*; 9,196 in *1891* and 10,052 in *1901*; and at the last census nearly sixty per cent. of the inhabitants were Hindus and more than twenty-four per cent. Jains. Mahārājā Sardār Singh, before his accession to the *gaddi* (1851,) built a fort here and called the town which grew up round it Sardārshahr. The place possesses a combined post and telegraph office; an anglo-vernacular and two vernacular schools attended by 145 boys; and a hospital with accommodation for seven in-patients.

Sūjāngarh Town.—The headquarters of the *nizāmat* and *tahsīl* of the same name, situated in 27° 42′ N. and 74° 29′ E., about seventy-two miles south-east of Bīkaner city and within half a mile of the Jodhpur border. The population increased from 5,238 in *1881* to 9,781 in *1891* and then fell to 9,762 in *1901*; at the last enumeration more than sixty-eight per cent. of the inhabitants were Hindus and

between eighteen and nineteen per cent. Musalmāns. The old name of the place was Harbuji-kā-kot, on the fort of Harbujī, a Rājput hero, and the present town was founded by Mahārājā Sūrat Singh (1788—1828), being named after Sūjān Singh, the twelfth chief of Bīkaner. The fort, which is about two hundred feet square, with walls from five to six feet in thickness, is said to have beenoriginally constr ucted by one of the Thākurs of Sāndwa (who once owned the place, but whose estate is now situated a little to the west) at the cost of the price of a horse which, judiciously exchanged in prosperous times for 3,000 maunds of *bājra*, enabled him during a subsequent famine to employ the hungry in erecting it; it was altered and improved by Sūrat Singh. The town contains several fine houses belonging to wealthy traders and made of red sandstone brought from the quarries near Lādnun just across the border; a combined post and telegraph office; a jail with accommodation for sixty-six prisoners; an anglo-vernacular and two vernacular schools attended by 158 boys; and a hospital with beds for seven in-patients. On a sand-hill to the west stands a substantial bungalow which was occupied from 1868 to 1870 by a British Political officer specially deputed to put town dacoity, then very rife on the triple border of Bīkaner, Jaipur and Jodhpur.

Sūratgarh Nizāmat.—A district situated in the north and north-west of the Bīkaner State, with an area of about 5,072 square miles. It is bounded on the north and north-west by Bahāwalpur; on the north-east by Ferozepore; and on the east by Hissār. The district is made up of the *tahsīls* of Hanumāngarh, Mirzawāla and Sūratgarh and the *sub-tahsīls* of Anūpgarh and Tibi, and in 1901 contained one town (Sūratgarh) and 480 villages. The population decreased from 83,366 in *1891* to 68,045 in *1901*, or by between eighteen and nineteen per cent., and at the last enumeration 67·8 per cent. of the inhabitants were Hindus and 29·7 per cent. Musalmāns. The principal castes were Jāts (18,965); Rāths (16,269); Chamārs (6,375); Brāhmans (2,590); Bishnois (2,448); Rājputs (2,420 including 141 Musalmāns); and Kumhārs (2,044).

The Ghaggar river formerly flowed in a westerly direction through the *nizāmat*, and its bed may be said to represent the northern limit of the sandy tract. To the south of it, there is a more or less continuous succession of ridges of light sand, between which are valleys, locally known as *johal* or *dābri*, of firmer and, in some places, of loamy ground, but once the Ghaggar is crossed the soil, though at first rather light and sandy, improves as one proceeds northwards, and the *tahsīls* of Hanumāngarh and Mirzawāla, with Tibi, are the most fertile portions of the State so far as quality of soil is concerned. The area available for cultivation is approximately 4,842 square miles, of which rather less than one-tenth has been cultivated annually during the last five years. Of the latter, *bājra* occupies about one-third and the minor millets and pulses one-fourth, while the following are the average areas (in square miles) under other crops:—oil-seeds 60; barley 38; gram 17; *jowār* 7; and wheat 5. In addition, maize, cotton and vegetables are all grown to a small extent The area

annually irrigated averages only twenty-seven square miles, namely thirteen from canals and the rest by the Ghaggar floods, with the exception of about five acres watered from wells. The district was not included among the original Rāthor conquests, but the ruling chief appears to have had a shadowy claim to the tract from an early period; he obtained a more or less permanent footing at Anūpgarh towards the end of the seventeenth century, but the country to the north-east was not finally incorporated in the State till the overthrow of the Bhattis and the capture of Bhatner in 1805.

Hanumāngarh Tahsīl.—A *tahsīl* situated in the north-east and east of the Sūratgarh *nizāmat*; it is bounded on the north by Ferozepore and on the east by Hissār, and contains 128 villages of which all but one are *khālsa*. The population decreased from 33,141 in *1891* to 20,165 in *1901*, or by thirty-nine per cent., and in the year last mentioned more than seventy-three per cent. of the inhabitants were Hindus and nearly twenty-two per cent. Muhammadans. The most numerous castes were Jāts (7,578); Rāths (3,316); Chamārs (1,898); Brāhmans (715); and Thorīs (611). The upper portion of the *tahsīl* consists of loamy soil of a yellowish tinge, which retains moisture well and, with proper irrigation, would be capable of producing the highest classes of crops; to the south the soil is lighter and more intermixed with sand. The largest proportion of *rabi* cultivation is found in this and the Mirzawāla *tahsīl* and in Tibi, the principal crops being barley alone or barley and gram mixed, followed by rape-seed and wheat. The *sajjī* plant, from which soda is manufactured, grows plentifully in the north, and the buffaloes reared here are very good, as indeed are all the cattle of the region. The history of the tract is identical with that of the fort of Bhatner, now called Hanumāngarh and noticed separately below.

Mirzawāla Tahsīl.—A *tahsīl* in the north-west of the Sūratgarh *nizāmat*, bounded on the north-east by Ferozepore and on the north and west by Bahāwalpur; it contains 128 *khālsa* villages. The population increased from 10,375 in *1891* to 14,272 in *1901*, or by 37½ per cent., and at the last census more than fifty-five per cent. of the inhabitants were Hindus and nearly forty-one per cent. Musalmāns. The principal castes were Rāths (5,142); Jāts (3,978); Chamārs (1,248); Khātis (381); and Baoris (347). In the extreme west is some light sandy soil, but more than half of the tract, especially the northern and north-eastern portion, is a level expanse of good firm loam which in places becomes clayish; a few low sand-hills are occasionally met with. A fairly large area is sown with barley, gram and rape-seed in the cold weather, and the Abohar branch of the Sirhind canal sometimes brings in a little water to a few villages in the north-east, but the supply is most uncertain and nothing whatever has been received for the last four or five years. The *tahsīl* was formerly included in that of Hanumāngarh, but as the work was considered too heavy for one man, it was decided to divide it into two separate charges, and thi was carried outs in 1887. The headquarters of the *tahsīldār* are at the small town of Mirzawāla, situated in 29° 58′ N.

and 73° 45′ E. about thirteen miles south of McLeod Ganj Road station on the Southern Punjab Railway (which runs for some four miles through the extreme north of the *tahsīl*) and approximately 140 miles north by north-east of Bīkaner city. Population (1901) 1,523. The place possesses a post office.

Sūratgarh Tahsīl.—A *tahsīl* in the south of the *nizāmat* of the same name and containing one town (Sūratgarh) and 126 villages, of which ninety-nine are *khālsa*. The population decreased from 24,894 in *1891* to 17,963 in *1901*, or by nearly twenty-eight per cent., and at the last census four-fifths of the inhabitants were Hindus. The principal castes were Jāts (4,065); Rāths (2,328); Chamārs (1,903); Bishnois (1,391); Rājputs (1,214, including fifty-nine Musalmāns); and Brāhmans (1,202). The bed of the Ghaggar runs from east to west through the centre of the tract, and the country to the south is a more or less continuous succession of ridges of light sand with valleys of firmer, and sometimes loamy, soil in between. To the north the ground is more level, and the soil is a light loam which would be productive with sufficient irrigation. There is a certain amount of *rabi* cultivation when rain falls at the proper time, and the chief crop is rape-seed. The grazing is excellent, and *sajjī* and *lānā* plants abound.

The tract was formerly called Sodhāwati because it was part of the territory occupied by the Sodha Rājputs (a branch of the Paramāras), but they were expelled by the Bhātis many hundred years ago, and no Sodha Rājput is now to be seen.

Anūpgarh Sub-tahsīl.—A *sub-tahsīl* situated in the west and south-west of the Sūratgarh *nizāmat*, and bounded on the west by the Bahāwalpur State; it now contains ninety *khālsa* villages. The population fell from 9,867 in *1891* to 7,497 in *1901*, or by twenty-four per cent., and in the year last mentioned about fifty-eight per cent. of the inhabitants were Musalmāns. The principal castes were Rāths (3,838); Jāts (826); Chamārs (631); and Rājputs (328, including two Muhammadans). Till about 1823 the country was a complete desert, the only inhabited spot being the fort of Anūpgarh. In the above year, and subsequently, some villages were founded in the portion south of the Ghaggar bed, but up to 1863 there are said to have been only two villages in the north, namely Balochia and Lākha. In 1871 the tract, till then *khālsa*, was given in *pattā* to Mahārāj Lāl Singh, but it again became *khālsa* on the latter's death in 1888. The soil is sandy except in the north where a light loam, locally called *baggī*, is found, and in the south-west where the area known as "chitrang" presents curious features, being an extensive plain of hard level ground which, owing to the excessive presence of natural salts, is unfitted for the production of crops. The *sub-tahsīl* is almost devoid of cultivation, and water is very scarce; *sajjī* and *lānā* plants, however, flourish and the grazing is good in parts.

The headquarters of the *naib-tahsīldār* are at the small town of Anūpgarh, situated in 29° 12′ N. and 73° 12′ E., about eighty-two miles almost due north of Bīkaner city and a little to the south of

the dry bed of the Ghaggar. Population (1901) 1,015. The place is only remarkable for its fort, which was built about 1678 on the site of an older one (called Churaia) and named after Anūp Singh, then chief of Bīkaner; it is said to have been captured by the Bhattis and Johiyas in 1759-60, but was soon recovered by the Darbār.

Tibi Sub-tahsīl.—A *sub-tahsīl* situated in the east of the Sūratgarh *nizāmat*, and containing thirty-seven villages. The population increased from 5,179 in 1891 to 8,148 in 1901, or by more than fifty-seven per cent., and at the last census seventy per cent. of the inhabitants were Hindus and nearly twenty-nine per cent. Musalmāns. The most numerous castes were Jāts (2,518); Rāths (1,645); Chamārs (695); Brāhmans (288); and Bishnois (279). The villages were formerly included in Hissār, and after the Pindāri war were handed over to old soldiers by the British Government. In 1822-23 the Bīkaner Darbār claimed the tract on the ground that they had taken it some twenty years earlier, but this claim was eventually disallowed. In 1861, however, forty-one villages of the annual value of Rs. 14,291 were granted by Government to Mahārājā Sardār Singh as a reward for his services during the Mutiny. Soon after, the Darbār disregarded the land revenue settlement which had been made by the British authorities with the villagers in 1856 for a term of twenty years, and, on the villagers complaining, an enquiry was held before the Commissioner of Hissār and it was found that, whereas the total revenue demand against the villages between 1861 and 1867 had been Rs. 90,000, the State officials had exacted two lakhs in excess of that sum. The Mahārājā was accordingly required in 1868 to abstain from interference with the rights of the *zamīndārs* as secured to them under the above settlement, and in the following year he signified his intention to exempt the villages from all but the usual customs-duties, to uphold the Government settlement and, as compensation for the losses sustained by the villagers during the seven years which had elapsed since the transfer of the lands to his State, to continue the settlement for seven years beyond the date of its expiry. A fresh settlement was made in 1883 and remained in force till 1906 when it was revised. Under the present arrangements, which are to continue in force for twenty years, the villages have to pay Rs. 22,000 annually to the Darbār, besides local rates and cesses.

The tract is the most fertile of the State, and practically any crop can be grown. The headquarters of the *naib-tahsīldār* are at the village of Tibi, which is situated on the southern bank of the Ghaggar in 29° 34′ N. and 74° 32′ E., within three miles of the Hissār border and about thirty-two miles due west of the town of Sirsa. Population (1901) 544. The place possesses a post office and a vernacular school.

Hamumāngarh Town.—The headquarters of the *tahsīl* of the same name in the Sūratgarh *nizāmāt*, situated on the left bank of the Ghaggar river in 29° 36′ N. and 74° 20′ E.; it is on the Jodhpur-Bīkaner Railway 144 miles north-east of Bīkaner city. Population (1901) 1,303. The place possesses a post office, a vernacular school

attended by 42 boys, a hospital with accommodation for seven in-patients, a railway dispensary, and a famous fort. The old name of the latter was Bhatner, the fortress or the habitation (*ner*) of the Bhattis, who were originally Bhāti Rājputs and who after becoming Musalmāns were called Bhattis. It was styled Hanumāngarh in 1805 because it was captured by the Bīkaner Darbār in that year on a Tuesday, a day sacred to the monkey-god.

Bhatner is frequently mentioned by the Musalmān historians; it has been identified as Bhatia captured by Mahmūd of Ghazni about 1004, but this is doubtful. In the middle of the thirteenth century, Sher Khāh, a cousin or nephew of Balban, was governor in these parts; he is said to have repaired the forts of Bhatinda and Bhatner and to have died at the latter place in 1269, a grand tomb being erected to his memory. In 1391 it was taken by Tīmūr from a Bhāti Rājput called Rājā (or Rao) Dul Chand, and was described as "an extremely strong and well-fortified place, so much so as to be renowned throughout the whole of Hindustān. All the water used by the inhabitants comes from a reservoir which is filled with rain-water during the rainy season and furnishes a supply for the whole year." An account of the siege and capture by Tīmūr will be found in Elliot's *History of India*, Vol. III, pages 422—27 and 487—91. Subsequently, the fort appears to have been held alternately by Bhattis, Johiyas and Chāyals (all Musalmān Rājputs) till 1527 when it was taken by Rao Jet Singh, the fourth chief of Bīkaner who in turn lost it to Kāmrān, son of the emperor Bābar, in 1538. It next reverted to the possession of the Chāyals but was recovered by Bikaner about 1560 and held for some twenty years when, in consequence of imperial treasure having been plundered in the vicinity, it was attacked and taken by the *Sūbahdār* of Hissār under orders from Akbar. Thereafter, the fort seems to have changed hands frequently until in 1805 it was, after a siege of five months, captured by the Bīkaner Darbār from a Bhatti chief named Zābita Khān.

Sūratgarh Town.—The headquarters of the *nizāmat* and *tahsīl* of the same name, situated on the left bank of the Ghaggar river in 20° 20′ N. and 73° 54′ E., and on the Jodhpur-Bīkaner Railway, 113 miles north by north-east of Bīkaner city and eighty-eight miles south-west of Bhatinda. The population decreased from 2,659 in *1891* to 2,398 in *1901* or by nearly ten per cent., and in the year last mentioned more than seventy-seven per cent. of the inhabitants were Hindus and nineteen per cent. Musalmāns. The town is named after Mahārājā Sūrat Singh, who is said to have founded it in or about 1800. It contains a fort, a post office, two vernacular schools attended by 93 boys, and a hospital with accommodation for seven in-patients. Two miles to the north-east are the ruins of Rang Mahal, supposed to have been the capital of a Johiya chief who, according to Tod, was "punished by a visitation of the Macedonian conqueror," namely Alexander the Great. A step-well made of bricks 2½ feet square has been found here, and the materials of Rang Mahal were used for the construction of the Sūratgarh fort and other buildings.

Bibliography.

A. Dow.—*History of Hindustān*, London, 1812.

W. Hamilton.—*A description of Hindustān*, London, 1820.

J. Briggs.—*History of the rise of the Muhammadan power*, London, 1829.

J. Tod.—*Annals and antiquities of Rājasthān*, London, 1829—32.

J. Sutherland.—*Sketches of the relations subsisting between the British Government in India and the different Native States*, Calcutta, 1837.

R. H. Irvine.—*Some account of the general and medical topography of Ajmer*, undated but published at Calcutta about 1840.

M. Elphinstone.—*History of India*, London, 1841.

E. Thornton.—*Gazetteer of the East Indian territories*, London, 1857.

Rājputāna Agency administration reports, annually from 1865-66.

H. M. Elliot.—*History of India—Muhammadan period*, Vols. I—V, London, 1867—73.

A. Cunningham.—*The ancient geography of India*, London, 1871.

Reports on dispensaries, jails and vaccination in Rājputāna, annually from 1872—73.

H. Blochmann and H. S. Jarrett.—*Ain-i-Akbarī*, Calcutta, 1873—94.

P. W. Powlett.—*Gazetteer of the Bīkaner State*, Calcutta, 1874.

G. B. Malleson.—*Native States of India*, London, 1875.

Rājputāna Gazetteer, Vol. I, Calcutta, 1879.

Rājputāna Census Reports, 1881, 1891, and 1901.

Great Trigonometrical Survey of India, Vol. VII-A, Dehra Dūn, 1887.

Sodhi Hukm Singh.—*Guide to Bīkaner and its suburbs*, Bīkaner, 1891.

Report on the relief operations undertaken in the Native States of Mārwār, Jaisalmer, Bīkaner, etc., during the scarcity of 1891-92, Bombay, 1892.

C. U. Aitchison.—*Collection of treaties, engagements and sanads*, Vol. III, Calcutta, 1892 (under revision).

P. J. Fagan.—*Report on the settlement of the khālsa villages of the Bīkaner State*, 1893.

W. W. Webb.—*Currencies of the Hindu States of Rājputāna*, Westminster, 1893.

Administration reports of the Bīkaner State from 1893-94 to 1895-96, and annually from 1902-03.

T. D. La Touche.—*Report on the occurrence of coal at Palāna village in the Bīkaner State*—see *Records, Geological Survey of India*, Vol. XXX, Part 3, Calcutta, 1897.

W. H. NEILSON.—*Medico-topographical account of Bīkaner*, Allahābād, 1898.
C. M. DUFF.—*Chronology of India*, Westminster, 1899.
T. H. HENDLEY.—*General medical history of Rājputāna*, Calcutta, 1900.
Report on the famine in Rājputāna in 1899-1900, Ajmer, 1901.
F. ASHTON.—*The salt industry of Rājputāna*—see *Journal of Indian Art and Industry*, Vol. IX, London, 1901.
Chiefs and leading families in Rājputāna, Calcutta, 1903.
S. S. JACOB.—*Note on irrigation in the Bīkaner State*, Jaipur, 1905.

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